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

**GENERAL RATE CASE**

**FILED**

MAR 31 2008

Clerk's Office  
N.C. Utilities Commission

**DOCKET NO. G-5, SUB 495**

**APPLICATION,  
TESTIMONY AND EXHIBITS**

**MARCH 2008**

**SET 1**

mt  
rate case  
distribution

WOMBLE  
CARLYLE  
SANDRIDGE  
& RICE  
A PROFESSIONAL LIMITED  
LIABILITY COMPANY



150 Fayetteville Street Mall, Suite 2100  
Raleigh, NC 27601

Mailing Address:  
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**FILED**

**MAR 31 2008**

Clerk's Office  
N.C. Utilities Commission

March 31, 2008

**VIA COURIER**

Ms. Renné Vance  
Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4325

Re: Docket No. G-5, Sub 495

Dear Ms. Vance:

I have enclosed for filing in the above-captioned docket 27 sets of documents as required by the Commission's Order in Docket No. G-100, Sub 44. Set 1 contains the originals of all items required by Form G-1 and the following:

1. Verified Application
2. Appendix to Application
3. Testimony of D. Russell Harris
4. Testimony of Jimmy E. Addison
5. Testimony of Dr. Donald A. Murry
6. Testimony of Dr. Julius A. Wright
7. Testimony of Sharon D. Boone
8. Testimony of Candace A. Paton

Sets 2 through 15 include the Application, the Testimony and Exhibits of witnesses, and the items required by Form G-1. Sets 16 through 27 include only a copy of the Application, Testimony, and Exhibits. Two extra sets are included, as is one to be file-stamped and returned. I have enclosed a check in the amount of \$500.00 for payment of the filing fee.

Thank you for your assistance with this matter. If you have any questions, you may reach me at the number shown above.

Very truly yours,

Mary Lynne Grigg

MLG:gmp  
Enclosures

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

**FILED**

**MAR 31 2008**

Clerk's Office  
N.C. Utilities Commission

DOCKET NO. G-5, SUB 495

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of:	)	
Application of Public Service Company	)	<b>APPLICATION</b>
Of North Carolina, Inc. for a General	)	
Increase in its Rates and Charges	)	

Pursuant to Sections 62-133, 62-133.7 and 62-134 of the General Statutes of the State of North Carolina ("G.S.") and Rules R1-4, R1-5, and R1-17 of the North Carolina Utilities Commission's ("Commission" or "NCUC") rules, Public Service Company of North Carolina, Inc., d/b/a PSNC Energy ("PSNC Energy" or the "Company"), respectfully applies to the Commission and requests that the Commission approve: (i) an increase of \$20,441,501 in rates and charges for natural gas utility service; (ii) certain changes to the cost allocations and rate designs underlying existing rates for the Company; (iii) certain revisions to the current tariff; (iv) amortization of certain deferred account balances; (v) implementation of a customer usage tracker ("CUT"); and (vi) the implementation of a cost recovery mechanism for customer conservation programs.

1. PSNC Energy was incorporated in 1938 and is a wholly-owned subsidiary of SCANA Corporation ("SCANA"). The Company is organized and existing under the laws of the State of South Carolina and has its principal office and place of business at

800 Gaston Road, Gastonia, North Carolina 28056. PSNC Energy's correct post office address and telephone number are:

Post Office Box 1398  
Gastonia, North Carolina 28053-1398  
(704) 864-6731 [Telephone]

The correct name and address of the attorneys for PSNC Energy are:

Craig Collins  
1426 Main Street  
Columbia, South Carolina 29201  
(803) 217-7513 [Telephone]  
(803) 217-7931 [Facsimile]  
ccollins@scana.com [email]

Mary Lynne Grigg  
Womble Carlyle Sandridge & Rice PLLC  
P.O. Box 831  
Raleigh, North Carolina 27602  
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William R. Pittman  
The Pittman Law Firm, PLLC  
1312 Annapolis Drive, Suite 200  
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(919) 836-2320 [Facsimile]  
wpittman@pittmanlawfirm.org [email]

2. PSNC Energy operates a natural gas pipeline system for the transportation, distribution, and sale of natural gas within a franchised area consisting of all or parts of twenty-eight (28) counties in central and western North Carolina as designated in PSNC Energy's certificates of public convenience and necessity issued by this Commission. PSNC Energy is engaged in providing natural gas utility service to the public and is a "public utility," as defined in G.S. § 62-3.

3. PSNC Energy has greatly expanded natural gas service in its rapidly growing service territory since its last general increase in rates and charges effective November 1, 2006, in Docket No. G-5, Sub 481. That increase in rates was based on operations during the test year ending December 31, 2005. Since the end of that test period, the Company has installed over 929 miles of transmission and distribution main and 41,492 service lines, added 31,812 customers (net of attrition), and made approximately \$188 million of capital investment in its utility property.

4. While the number of customers PSNC Energy serves continues to grow significantly, the weather-normalized throughput per residential customer continues to decrease based on more efficient appliances, better insulated homes and office buildings and volatile natural gas prices which have caused customers to conserve. Under the Company's volumetric rate structure, customer usage is the determining factor in whether the Company is able to fully recover its costs and have an opportunity to earn a fair, allowed rate of return. The result of declining usage is a reduction in the margins that were supposed to be recovered in the volumetric rates. Additionally, the volumetric rate structure creates a disincentive for the Company to implement energy efficiency and conservation initiatives for its customers. The Company requests approval of its proposed CUT, a decoupling mechanism which will adjust revenues to correspond to the volumes determined in this proceeding. The CUT is in the public interest because it addresses the decreasing usage and removes the disincentive for promoting conservation. If the Commission authorizes the CUT, the Company proposes to file for approval three

conservation programs and to discontinue its weather normalization adjustment mechanism.

5. As a result of significant, new investment in facilities, increased costs of operations, and decreasing usage per customer since the last case, the rates currently approved by the Commission are now insufficient to provide PSNC Energy with a fair and reasonable rate of return on its investment in property used and useful in providing natural gas utility service to the public. To allow PSNC Energy to continue investing prudently in the growth, safety, and reliability of its system, a general increase is necessary and justified.

6. The original cost of the property used and useful in rendering natural gas service to the public as of December 31, 2007, was \$1,147,500,276. In addition thereto, PSNC Energy had working capital of \$62,997,642. After excluding deferred taxes of \$104,922,583 and the portion of the original cost consumed by previous use and recovered by depreciation expense of \$414,361,078, the total end of period net investment on December 31, 2007, was \$691,214,257. PSNC Energy earned an annual rate of return of only 7.84% upon this investment during the test year ended December 31, 2007, and on a pro forma basis would earn an annual rate of return of 7.65%.

7. By this Application, PSNC Energy requests approval of an increase in revenue of \$20,441,501 to permit the Company to earn a fair return on its investment.

8. PSNC Energy respectfully submits that the adjustment in its rates and charges which it proposes herein is necessary and in the public interest for the following reasons, among others:

a. Since December 31, 2005, the end of the test period in PSNC Energy's last general rate case, operating and maintenance expenses and depreciation expenses have increased in combination with a significant increase in net utility plant and customer base.

b. PSNC Energy will require substantial additional capital in the future to ensure the ongoing maintenance and safety of its delivery system and to expand to serve new customers. The Company's ability to finance these expenditures under reasonable terms will be determined largely by its ability to earn a fair and reasonable return on its investments. Its existing rates are and will be inadequate.

c. The rates and charges proposed herein are just and reasonable and will provide PSNC Energy an opportunity to earn a fair return on its investment in property used and useful in providing service to the public.

9. Pursuant to the Commission's rules, PSNC Energy is filing with its Application: Appendix 1 (Summary of changes affecting customers), NCUC Form G-1, and the prepared direct testimony and exhibits of the following witnesses in support of this request: D. Russell Harris, who is testifying with respect to the Company's operations and justification for a rate increase; Jimmy E. Addison, who is testifying with respect to PSNC Energy's financial requirements and capital structure; Dr. Donald A. Murry, who is testifying with respect to PSNC Energy's requested return on equity and overall rate of return; Dr. Julius A. Wright, who is testifying with respect to the CUT and PSNC Energy's conservation programs; Sharon D. Boone, who is testifying with respect

to the accounting schedules and data supporting PSNC Energy's application; and Candace A. Paton, who is testifying with respect to PSNC Energy's proposed rate design, cost of service, and changes to the Tariff.

10. PSNC Energy will provide additional relevant, material, and competent evidence as may be permitted by G.S. § 62-133(c) or other North Carolina law concerning the Company's costs, revenues, volumes, rate base return, or any other matter relevant to the Commission's determination of the matters raised herein.

11. Pursuant to the provisions of Rule R1-17 of the Commission's Rules and Regulations, PSNC Energy attaches hereto and makes a part of this Application the following schedules which are contained in Ms. Candace A. Paton's and Ms. Sharon D. Boone's exhibits:

- 1) Present charges (Paton Exhibit 1).
- 2) Proposed charges (Paton Exhibit 2).
- 3) Statement of end of period net investment at December 31, 2007 (Boone Exhibit 1).
- 4) Statement showing accumulated depreciation balances at December 31, 2007 (Boone Exhibit 2).
- 5) Statement of materials and supplies necessary for operation of PSNC Energy's business (Boone Exhibit 3).
- 6) Statement of cash working capital (Boone Exhibit 4).
- 7) Statement of net operating income for return for the twelve months ended December 31, 2007 (Boone Exhibit 5).
- 8) Statement showing effect of proposed increase, additional revenues and expenses anticipated, and the rates of return on utility property. Statement showing capital structure and rates of return on equity before and after the proposed increase (Boone Exhibit 6).



9) Balance sheet at December 31, 2007, and income statement for the twelve months ended December 31, 2007 (Boone Exhibit 7).

12. The Company is proposing certain changes in rate designs, cost allocations, classifications, tariffs, and customers may experience increases or decreases due to these changes. The rates and charges proposed herein are based on these changes, and are discussed in Ms. Paton's testimony.

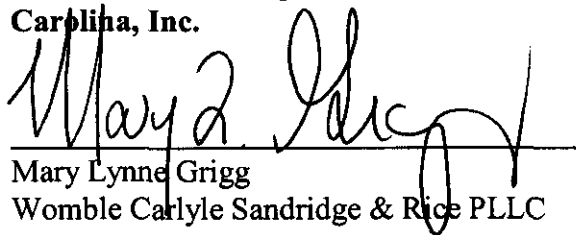
13. The Company proposes in this docket to amortize certain costs for which the Commission has previously approved deferred accounting. These adjustments are addressed in Ms. Boone's testimony.

14. PSNC Energy proposes to place the new rates provided herein into effect on May 1, 2008; however, the Company anticipates that the Commission will suspend the rates and set this Application for hearing. The Company requests that the Commission establish a procedural schedule that will permit the proposed rates to become effective November 1, 2008.

WHEREFORE, the Company respectfully requests that the Commission grant a general increase in rates and charges for natural gas services, approve the rates and customer usage tracker set forth herein, and approve the changes in rate designs, costs, revenue and rate base, cost allocations, rate schedules, classifications and practices proposed herein. The Company further requests that the Commission grant a waiver of any of the Commission's Rules and Regulations as may be necessary or appropriate to provide the Company with the relief requested in this Application.

Respectfully submitted, this the 31<sup>st</sup> day of March, 2008.

**Public Service Company of North  
Carolina, Inc.**

A handwritten signature in black ink, appearing to read "Mary L. Grigg", is written over a horizontal line.

Mary Lynne Grigg  
Womble Carlyle Sandridge & Rice PLLC  
PO Box 831

Raleigh, NC 27602  
(919) 755-2155 [Telephone]  
(919) 755-6085 [Facsimile]

Attorney for PSNC Energy

## APPENDIX 1

Public Service Company of North Carolina, Inc.

Docket No. G-5, Sub 495

### Summary of Proposed Increases and Changes

PSNC Energy seeks an increase in revenue of \$20,441,501. Proposed changes by customer group are as follows:

<u>Customer Group</u>	<u>Change in Revenue</u>	<u>% Change</u>
Residential	\$ 15,113,114	3.50%
Small General Service	\$ 3,679,524	2.09%
Large General Service - Firm	\$ 452,316	1.33%
Large General Service - Interruptible	\$ 1,194,829	2.87%

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

DOCKET NO. G-5, SUB 495

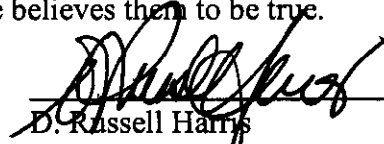
BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of: )  
Application of Public Service Company )  
Of North Carolina, Inc. for a General )  
Increase in its Rates and Charges )

VERIFICATION

STATE OF NORTH CAROLINA )  
GASTON COUNTY )

D. RUSSELL HARRIS, being first duly sworn, deposes and says that (i) he is an officer, to wit: President, and Chief Operating Officer of Public Service Company of North Carolina, Inc., the Applicant in the above-captioned matter, (ii) he has read the foregoing Application and knows the contents thereof, and (iii) the same are true of his own knowledge except for those matters and things therein alleged on information and belief and as to those matters and things he believes them to be true.

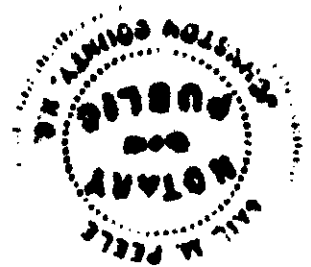
  
D. Russell Harris  
President and Chief Operating Officer

Sworn to and subscribed before me, this 27<sup>th</sup> day of MARCH, 2008.

Gail M. Peele

Notary Public

My Commission expires 4/1/08



**Certificate of Service**

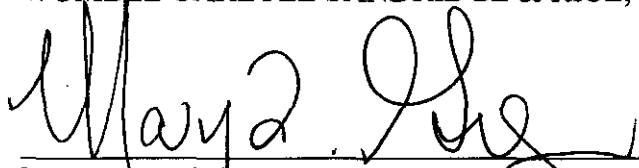
This is to certify that the foregoing Application of Public Service Company of North Carolina, Inc. for a General Increase in its Rates and Charges, and accompanying Testimonies and Exhibits were duly served upon all parties of record by hand-delivery or United States mail, first-class postage prepaid, or by facsimile, on the following:

Margaret Force Esq.  
Office of the Attorney General  
PO Box 629  
Raleigh, NC 27602-0629  
Fax: (919) 716-6757

Robert F. Page Esq.  
Crisp, Page & Currin, LLP  
4010 Barrett Drive, Suite 205  
Raleigh, NC 27609-6622  
Fax: (919) 791-0010

This the 31<sup>st</sup> day of March 2008.

WOMBLE CARLYLE SANDRIDGE & RICE, PLLC

A handwritten signature in black ink, appearing to read "Mary Lynne Grigg", written over a horizontal line.

Mary Lynne Grigg  
Womble Carlyle Sandridge & Rice, PLLC  
PO Box 831  
Raleigh, NC 27602  
919-755-2155 (telephone)  
919-755-6085 (facsimile)

**FILED**

**MAR 31 2008**

Clerk's Office  
N.C. Utilities Commission

BEFORE THE

NORTH CAROLINA UTILITIES COMMISSION

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 495

DIRECT TESTIMONY

OF

D. RUSSELL HARRIS

MARCH 31, 2008

1 Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION WITH  
2 PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

3 A. My name is D. Russell Harris. My business address is 800 Gaston Road, Gastonia,  
4 North Carolina 28056. I am President and Chief Operating Officer (“COO”) of Public  
5 Service Company of North Carolina, Inc., d/b/a PSNC Energy (“PSNC Energy” or the  
6 “Company”).

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

9 A. I am a 1986 graduate of Clemson University with a Bachelor of Science in Electrical  
10 Engineering. In 1990, I received a Master of Business Administration from the  
11 University of South Carolina. From 1986 to 1992, I worked for South Carolina Electric  
12 & Gas Company (“SCE&G”) as a Customer Service Engineer, and in 1992, I became  
13 District Manager – Electric Operations. From 1997 to 2003, I served as Vice President  
14 – Wires Operation for SCE&G. In 2003, I became Vice President – Operations for  
15 PSNC Energy, and in January 2006, I was promoted to President and COO for PSNC  
16 Energy. In this capacity, I have responsibility for all day-to-day operations at PSNC  
17 Energy including sales and marketing, engineering, construction, operations and  
18 maintenance (“O&M”), and customer service activities.

19 Q. PLEASE DESCRIBE PSNC ENERGY.

20 A. PSNC Energy was incorporated in 1938 and is a public utility engaged in the business  
21 of selling, distributing and transporting natural gas subject to this Commission’s  
22 jurisdiction. In 2000, PSNC Energy became a wholly-owned subsidiary of SCANA

1 Corporation ("SCANA"). PSNC Energy provides natural gas service to approximately  
2 457,000 customers in 96 cities and communities in central and western North Carolina.  
3 Our service territory encompasses all or portions of 28 counties, and we consider  
4 ourselves very fortunate to serve these areas and the growth that they have experienced.

5 Q. HAS THIS GROWTH CAUSED PSNC ENERGY TO EXPAND ITS SYSTEM?

6 A. Yes. Consumers continue to demand our product and we have made significant  
7 investments in our system in order to provide natural gas service. Since December  
8 2005, we have installed over 929 miles of main and 41,000 service lines, and added  
9 almost 32,000 new customers net of attrition. During that time the number of  
10 residential customers we serve grew approximately 8%. PSNC Energy has been an  
11 enthusiastic partner in the growth and economic development of our communities and  
12 state, and has expanded its system to serve that growth.

13 Q. HAS PSNC ENERGY CONTINUED TO MEET ITS CUSTOMER SERVICE GOALS  
14 IN THIS TIME OF GROWTH?

15 A. Yes. PSNC Energy works diligently to provide superior service to all our customers.  
16 We are proud of the fact that our Customer Contact Center consistently meets or  
17 exceeds our target of 80% of calls answered within 20 seconds. We conduct periodic  
18 customer surveys which indicate a high level of overall satisfaction with our service.  
19 Additionally, in the 2006 and 2007 J. D. Power surveys, we rated above national and  
20 regional averages for residential customer satisfaction in our peer group of natural gas  
21 utilities.

22 Q. WHAT STEPS HAS PSNC ENERGY TAKEN TO PROMOTE EFFICIENT



1 OPERATIONS AND A HIGH LEVEL OF SERVICE?

2 A. Over the last two years, we have completed, or begun to implement, several customer  
3 service, operational and safety initiatives to serve our customers more effectively.

- 4 • Since 2005, PSNC Energy has installed automated meter reading (“AMR”)  
5 devices on all residential and commercial meters in our Gastonia, Raleigh and  
6 Asheville regions. This system uses a small transmitter mounted on each meter  
7 which can be read by a receiver in a vehicle driven through the neighborhood or  
8 by a handheld unit. This improves meter reading accuracy and eliminates  
9 sending a meter reader into customers’ yards, which improves customer  
10 relations and reduces cost. All residential and commercial meters will have this  
11 device installed by the end of 2008, when we complete AMR installation in our  
12 Durham region.
- 13 • In 2005, we began to install a computer-aided dispatch system (“CADS”) for  
14 our service vehicles to handle after-hours customer service calls and  
15 emergencies. The CADS process worked so well that in 2006 and 2007 we  
16 added an additional fifty CAD units to our field service fleet in order to handle  
17 normal calls during regular work hours. Building upon this success, we began  
18 to implement a new centralized dispatch center to dispatch our customer  
19 service, emergency and line location orders. At the end of 2007 we had  
20 effectively consolidated the thirteen field locations that were dispatching paper  
21 orders into four dispatching locations using the CADS paperless system. We  
22 plan to take another step in 2008 by completing the consolidation of these four

1 locations into one central location. We are also planning to add GPS units to  
2 our service vehicles, which will enhance workload scheduling, improve  
3 emergency response and provide additional safety and security for our  
4 employees.

- 5 • The Company recently completed the replacement of all cast-iron distribution  
6 main located in the downtown areas of Asheville, Raleigh and Durham. This  
7 six-year project cost over \$22 million and replaced over seventy miles of pipe.  
8 The completion of this project is a significant milestone in the history of the  
9 Company, as some of the pipe had been in use since the Company's inception in  
10 1938. This accomplishment will decrease gas leaks and lost gas costs, while  
11 improving system capacity, delivery pressures and safety in these areas.

- 12 • Safety is our number one priority -- the safety of our customers, our employees  
13 and the public at large. The Company's focused efforts on employee safety in  
14 2007 resulted in the lowest Accident Frequency Rate and the lowest number of  
15 employee injuries in many years and well below industry average. Improved  
16 safety performance results in lower costs, better employee morale, and better  
17 service to our customers.

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

19 A. A rate case is necessary at this time because the Company is not earning a fair return on  
20 its investment. In our last general rate case the Commission concluded a reasonable  
21 overall rate of return was 8.90%; yet in the test year that ended December 31, 2007 our  
22 overall rate of return was 7.84%. This shortcoming occurred primarily for the

1 following reasons:

- 2 • The Company has added more than \$100 million in net investment since its last  
3 general rate case, and it is not earning a return on that investment. This  
4 represents more than 16% of the Company's total net investment.
- 5 • The Company has experienced increases in O&M and depreciation expenses of  
6 approximately \$5.6 million since the end of 2005.
- 7 • The Company has continued to experience declining usage per customer, which  
8 has resulted in lower volumes sold than those established in the last general rate  
9 case.

10 Q. DOES DECLINING USAGE PER CUSTOMER NEED TO BE ADDRESSED IN  
11 THIS PROCEEDING?

12 A. Yes. The reduction in volumes since our last general rate case shows that the declining  
13 use per customer phenomenon I described in my testimony in that case continues. Over  
14 the last five years, weather-normalized usage per residential customer has declined an  
15 average of 2% per year. The trend is primarily attributable to higher efficiency  
16 appliances, more energy-efficient homes and buildings, and the volatility of the  
17 commodity cost of natural gas, which has caused our customers to conserve.  
18 Additionally, this Commission, other governmental agencies and the media have  
19 educated consumers on the benefits of conservation, which undoubtedly has  
20 contributed to reductions in per-customer usage. It has come to the point that declining  
21 usage is significantly limiting the Company's ability to earn a fair rate of return, and an  
22 alternative ratemaking mechanism must be considered.

1 Q. HOW DOES THE COMPANY PROPOSE TO ADDRESS THE EFFECT OF  
2 DECLINING USAGE PER CUSTOMER?

3 A. The Company believes a Customer Usage Tracker ("CUT") is a necessary component  
4 of ratemaking in an era of declining usage per customer and is requesting Commission  
5 approval of such a ratemaking mechanism.

6 Q. PLEASE EXPLAIN.

7 A. The proposed CUT will fairly adjust rates between general rate cases in order to aid us  
8 in the opportunity to achieve a fair rate of return. However, the CUT will not allow the  
9 Company to earn any more than it otherwise would have had the anticipated volumes  
10 determined in the case been realized. Moreover, in the current regulatory framework,  
11 any extensive actions the Company might take to encourage conservation on the part of  
12 its customers would undermine the Company's responsibility to its shareholders.  
13 Implementation of the CUT removes the Company's disincentive to encourage  
14 conservation that exists with our current ratemaking design.

15 Q. HOW WILL THE CUT REMOVE THIS DISINCENTIVE?

16 A. PSNC Energy promotes the wise and efficient use of our product, but absent a  
17 mechanism such as the CUT it is not in the Company's best financial interests to  
18 encourage conservation. If consumers use less natural gas under the current regulatory  
19 framework, the Company suffers the under-recovery of margins just as we have  
20 experienced. However, if the CUT is implemented, the Company can encourage  
21 conservation without adversely affecting its financial health. Therefore, if the  
22 Company is granted the CUT, PSNC Energy proposes to vigorously implement

1 comprehensive customer conservation programs in order to facilitate and encourage  
2 conservation, which will help our customers reduce their natural gas bills. The  
3 Company's proposed programs include a customer communications initiative, in-home  
4 energy audits which will provide for on-site weatherization and energy improvements,  
5 and energy efficiency rebates. Dr. Wright's testimony further discusses these  
6 programs, while Ms. Paton's testimony addresses the associated cost-recovery method.

7 Also, PSNC Energy is proposing residential and commercial high-efficiency  
8 rates which will provide a discount for customers whose dwellings and buildings  
9 comply with certain efficiency standards. Ms. Paton's testimony further addresses these  
10 rates. We believe that the proposed customer conservation programs and high-  
11 efficiency rates demonstrate a significant commitment on the part of the Company to  
12 facilitate and encourage conservation.

13 Q. IF THE COMMISSION APPROVES THE CUT, DOES THE COMPANY PROPOSE  
14 TO ABANDON THE CURRENT WEATHER NORMALIZATION ADJUSTMENT  
15 ("WNA")?

16 A. Yes. The CUT will adjust rates for all variances in usage per customer, including those  
17 that are weather sensitive. However, should the Company not be granted its proposed  
18 CUT, the WNA mechanism would need to remain in effect. This is further addressed in  
19 Ms. Paton's testimony.

20 Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

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

**FILED**  
**MAR 31 2008**  
Clerk's Office  
N.C. Utilities Commission

BEFORE THE  
  
NORTH CAROLINA UTILITIES COMMISSION  
  
PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 495

DIRECT TESTIMONY  
  
OF  
  
JIMMY E. ADDISON

MARCH 31, 2008

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

2 A. My name is Jimmy E. Addison and my business address is 1426 Main Street,  
3 Columbia, South Carolina. I am Senior Vice President and Chief Financial Officer of  
4 SCANA Corporation ("SCANA") and its subsidiaries, including Public Service  
5 Company of North Carolina, Inc. ("PSNC Energy" or the "Company").

6 Q. PLEASE DESCRIBE YOUR EDUCATION AND BUSINESS BACKGROUND.

7 A. I am a graduate of the University of South Carolina with a Bachelor of Science Degree  
8 in Business Administration, and a Master of Accountancy Degree. Also, I hold a  
9 certificate as a Certified Public Accountant in South Carolina. Prior to my employment  
10 by SCANA in March 1991, I was employed for seven years by the certified public  
11 accounting firm of Deloitte & Touche, in Charlotte and then in Columbia where I was  
12 designated an Audit Manager as a public utility accounting and audit specialist. I was  
13 also a partner in the public accounting firm of Hughes, Boan and Addison immediately  
14 prior to joining SCANA.

15 Q. WHAT ARE YOUR DUTIES WITH PSNC ENERGY?

16 A. As Senior Vice President and Chief Financial Officer of PSNC Energy, I have  
17 responsibility for monitoring the Company's present and prospective financial  
18 condition; for formulating strategies to ensure that the Company can meet its capital  
19 requirements at a reasonable cost; and for managing all accounting and financial  
20 matters related to the Company. My position also makes me responsible for raising  
21 capital for the Company and SCANA in both debt and equity markets, and I meet

1 regularly with underwriters, investment advisers and other representatives of  
2 investors in that context.

3 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

4 A. The purpose of my testimony is to provide an overview of the financial status of  
5 PSNC Energy as it relates to the decision to seek rate relief at this time. I will also  
6 testify concerning the perspectives of the financial community on the Company and  
7 this proceeding and why the 12.0% Return on Equity ("ROE") requested is a  
8 reasonable ROE for the Company.

9 Q. WHAT LEVEL OF INVESTMENT IS PSNC ENERGY PRESENTLY MAKING IN  
10 ITS SYSTEM?

11 A. As the Company's President, Mr. Harris, has testified, the number of residential  
12 customers we serve has grown approximately 8% since our last general rate case. To  
13 keep pace with this growth, we have made significant investments in our system.  
14 These investments were in addition to the other investments that PSNC Energy has  
15 made to upgrade, repair or replace facilities that are reaching the end of their useful  
16 lives.

17 These capital investments provide substantial benefits to the people of North  
18 Carolina. For all their benefits, however, these investments do have an impact on  
19 PSNC Energy's balance sheet, and ultimately, on rates. Since PSNC Energy's last  
20 rate proceeding, net investment in rate base increased from \$580 million, measured as  
21 of the close of the 2005 test period, to \$691 million, measured at the close of the test  
22 period in this proceeding. This reflects a two-year increase of 19%. The cost of  
23 capital associated with this increase in rate base is one of the principal factors driving



1 the present rate request. Based on the return requested in the Application, the capital  
2 cost associated with this \$111 million increase in rate base is \$15.1 million.

3 At the same time, PSNC Energy's operations have been subject to the effects  
4 of inflation, just as other businesses have. Inflation as measured by the Producer  
5 Price Index totaled 7.5% over the last two years. The Consumer Price Index rose by  
6 6.7%.

7 Q. WHAT FINANCIAL RESULTS DID THE COMPANY ACHIEVE DURING THE  
8 TEST PERIOD?

9 A. As the Application in this proceeding indicates, for the adjusted test period ending  
10 December 31, 2007, the Company earned an overall return of only 7.84 % percent.  
11 This compares to the overall return of 8.9% which the Commission deemed to be  
12 appropriate for the Company in Docket No. G-5, Sub 481.

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

15 A. The test period return reflects the capital structure on which the Company based its  
16 rate request in the Application. That capital structure reflects long term debt of  
17 35.89%, short term debt of 10.36%, and equity of 53.75%. The short term debt figure  
18 reflects the average of gas inventory for the 13 months ending June 2008, consistent  
19 with Commission practice. The long term debt and equity figures reflect actual  
20 numbers adjusted for forecasted changes through June 30, 2008. These percentages  
21 reflect the methods used to measure capital structure that this Commission has used in  
22 past cases involving the Company and in my opinion are the appropriate figures to  
23 use in this proceeding given these precedents.

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

2 A. On an adjusted test-year basis, the Company's 7.65% overall rate of return translates  
3 into a return on equity of 8.82% which, as I discuss below, is clearly insufficient to  
4 allow the Company to continue to attract the capital required to provide natural gas  
5 service and to support on-going investment in the gas system.

6 Q. WHAT LEVEL OF RATE RELIEF IS THE COMPANY SEEKING?

7 A. In this docket, PSNC Energy is requesting a base rate increase of 2.99%, which is less  
8 than the rate of inflation since the Company's last general rate proceeding. The  
9 requested increase would allow the Company to earn an overall rate of return of  
10 9.36% and a return on equity of 12.0%. The return on equity is a key consideration  
11 for investors when assessing whether to invest in a company like PSNC Energy. It is  
12 my opinion that establishing rates to produce a return on equity of 12.0% would be a  
13 reasonable and constructive outcome to this proceeding while fairly balancing the  
14 needs of investors and customers.

15 Q. IN YOUR ROLE AS CHIEF FINANCIAL OFFICER FOR PSNC ENERGY, WHAT  
16 INVOLVEMENT DO YOU HAVE WITH CAPITAL MARKETS?

17 A. As Chief Financial Officer of PSNC Energy, I am principally responsible for  
18 managing PSNC Energy's relationships with investors, security analysts, the agencies  
19 which rate our debt securities and other members of the financial community. In that  
20 regard, I meet regularly with members of the financial community, including the Wall  
21 Street analysts and credit rating agency personnel who follow the utility industry in  
22 general and PSNC Energy specifically. In these meetings, we discuss the investment  
23 community's perceptions and concerns about the Company, the Company's financial

1 and business position, and the general condition of capital markets and the utility  
2 industry. We also discuss the various risk factors that the Company faces as seen by  
3 investors. I am also regularly involved in similar discussions with underwriters and  
4 other experts as such views pertain to the issuance or refinancing of debt and other  
5 capital matters.

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

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

13 This sustained pace of on-going capital investment will expose PSNC Energy  
14 to the risk and volatility of national capital markets in ways that utilities serving less  
15 rapidly developing areas will not experience. PSNC Energy is in a very capital  
16 intensive phase of its history as a business. It is subject to all the risks and  
17 uncertainties entailed in managing a business with significant on-going capital needs.

18 At the same time, investors see the levels of risk and volatility in financial  
19 markets as being at very high levels today. Emblematic of those high levels of risk is  
20 the collapse of the sub-prime lending industry, the threat of deflation in the housing  
21 market, and the downgrading of ratings for bond insurance firms with the result being  
22 more widespread disruption of debt markets in general. Investors see PSNC Energy  
23 as a company that will need to access capital from these volatile markets for many

1 years and that will be subject to the terms those markets offer as it seeks that capital.

2 This combination of volatile capital markets and high exposure to them means that  
3 investors see businesses like PSNC Energy as bearing substantial risk.

4 Q. HOW DOES PSNC ENERGY'S REQUEST FOR A CUSTOMER USAGE  
5 TRACKER AFFECT INVESTOR'S PERCEPTIONS OF THE COMPANY?

6 A. The implementation of the Customer Usage Tracker ("CUT") is important because it  
7 frees PSNC Energy to play a more dynamic role in promoting conservation. But  
8 from a financial standpoint, it is important not to overestimate the impact of the CUT  
9 on the Company's risk profile as perceived by investors. Apart from the issue of  
10 future declining usage per customer, the CUT will not affect the principal risk factors  
11 that PSNC Energy faces today, which include risks due to the volatile capital markets,  
12 increasing capital demands and operating costs, a rapidly expanding service territory,  
13 volatile gas supplies and costs, and the overall economic uncertainty that our nation  
14 finds itself in today. The feedback I have received in my discussions with financial  
15 analysts and other members of the investment community has been consistent. The  
16 investment community does not perceive the CUT as a major development for PSNC  
17 Energy from a risk or market perception perspective. While investors see the CUT as  
18 a valuable tool for supporting energy conservation, they do not believe that it will  
19 reduce the overall risks that the Company faces based on the factors I discussed  
20 above. From the investors' perspective, the CUT is similar to a weather  
21 normalization adjustment and other rate stabilization programs which have become  
22 standard in the industry. In investors' view, the filing of the CUT does not  
23 significantly differentiate PSNC Energy from other companies in which they may

1 invest. I would not expect the approval of the CUT alone to impact investors'  
2 perceptions of the overall risk faced by PSNC Energy.

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

4 A. The Company has filed its Application based on an ROE of 12.0% and is requesting  
5 that the Commission set an ROE at that level.

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

7 A. Yes. The Company's cost of capital witness, Dr. Murry, has provided the  
8 Commission with a detailed cost of capital analysis concerning PSNC Energy's ROE.  
9 He concludes, based on the financial tools and models he has used, that the required  
10 ROE for PSNC Energy would be in a range of 11.5% to 12.0% and specifically  
11 recommends 12.0%.

12 As Dr. Murry recognizes, the results of the financial tools and models he used  
13 must be tested against the realities of the markets and the individual companies  
14 involved. Based on my knowledge of the financial community and how it perceives  
15 PSNC Energy specifically, I agree with Dr. Murry's conclusion that a 12.0% ROE is  
16 appropriate. Adopting an unduly low ROE in this case could increase the cost of  
17 capital and, therefore, the ultimate cost to customers.

18 As is always the case, the Commission's ROE decision would have to be  
19 placed within the context of the overall order, and the other individual decisions that  
20 order contains. But all other things being equal, a 12.0% ROE would represent a  
21 constructive ROE for the Company. It would support the financial integrity of PSNC  
22 Energy and its continued ability to access national capital markets on reasonable  
23 terms in this time of increasing financial uncertainty. A 12.0% ROE in this case

1           would give investors confidence that PSNC Energy would continue to be able to raise  
2           capital in national markets on reasonable terms.

3    Q:    DOES THIS CONCLUDE YOUR TESTIMONY?

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

**FILED**  
**MAR 31 2008**  
Clerk's Office  
N.C. Utilities Commission

BEFORE THE  
  
NORTH CAROLINA UTILITIES COMMISSION  
  
PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 495

DIRECT TESTIMONY  
  
OF  
  
DONALD A. MURRY, Ph.D.

MARCH 31, 2008

**I. POSITION AND QUALIFICATIONS**

1  
2 Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

3 A. My name is Donald A. Murry. My business address is 5555 North Grand  
4 Boulevard, Oklahoma City, Oklahoma 73112.

5 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

6 A. I am a Vice President and economist with C. H. Guernsey & Company. I work  
7 out of the Oklahoma City, Oklahoma and the Tallahassee, Florida offices. I am also a  
8 Professor Emeritus of Economics on the faculty of the University of Oklahoma.

9 Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

10 A. I have a B. S. in Business Administration, and a M.A. and a Ph.D. in  
11 Economics from the University of Missouri - Columbia.

12 Q. PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND.

13 A. From 1964 to 1974, I was an Assistant and Associate Professor and Director  
14 of Research on the faculty of the University of Missouri - St. Louis. For the period  
15 1974-98, I was a Professor of Economics at the University of Oklahoma, and since  
16 1998, I have been Professor Emeritus at the University of Oklahoma. Until 1978, I  
17 also served as Director of the University of Oklahoma's Center for Economic and  
18 Management Research. In each of these positions, I directed and performed academic  
19 and applied research projects related to energy and regulatory policy. During this  
20 time, I also served on several state and national committees associated with energy  
21 policy and regulatory matters, published, and presented a number of papers in the  
22 field of regulatory economics in the energy industries.

23 Q. WHAT IS YOUR EXPERIENCE IN REGULATORY MATTERS?



1     A.           I have consulted for private and public utilities, state and federal agencies, and  
2           other industrial clients regarding energy economics and finance and other regulatory  
3           matters in the United States, Canada and other countries. In 1971-72, I served as  
4           Chief of the Economic Studies Division, Office of Economics of the Federal Power  
5           Commission. From 1978 to early 1981, I was Vice President and Corporate  
6           Economist for Stone & Webster Management Consultants, Inc. I am now a Vice  
7           President with C. H. Guernsey & Company. In all of these positions, I have directed  
8           and performed a wide variety of applied research projects and conducted other  
9           projects related to regulatory matters. I have assisted both private and public  
10          companies and government officials in areas related to the regulatory, financial and  
11          competitive issues associated with the restructuring of the utility industry in the  
12          United States and other countries.

13    Q.    HAVE YOU PREVIOUSLY TESTIFIED BEFORE OR BEEN AN EXPERT  
14          WITNESS IN PROCEEDINGS BEFORE REGULATORY BODIES?

15    A.           Yes, I have appeared before the U.S. District Court-Western District of  
16          Louisiana, U.S. District Court-Western District of Oklahoma, District Court-Fourth  
17          Judicial District of Texas, U.S. Senate Select Committee on Small Business, Federal  
18          Power Commission, Federal Energy Regulatory Commission, Interstate Commerce  
19          Commission, Alabama Public Service Commission, Regulatory Commission of  
20          Alaska, Arkansas Public Service Commission, Colorado Public Utilities Commission,  
21          Florida Public Service Commission, Georgia Public Service Commission, Illinois  
22          Commerce Commission, Iowa Commerce Commission, Kansas Corporation  
23          Commission, Kentucky Public Service Commission, Louisiana Public Service  
24          Commission, Maryland Public Service Commission, Mississippi Public Service

1 Commission, Missouri Public Service Commission, Nebraska Public Service  
2 Commission, New Mexico Public Service Commission, New York Public Service  
3 Commission, Power Authority of the State of New York, Nevada Public Service  
4 Commission, North Carolina Utilities Commission, Oklahoma Corporation  
5 Commission, South Carolina Public Service Commission, Tennessee Public Service  
6 Commission, Tennessee Regulatory Authority, The Public Utility Commission of  
7 Texas, the Railroad Commission of Texas, the State Corporation Commission of  
8 Virginia, and the Public Service Commission of Wyoming.

9  
10 **II. PURPOSE OF TESTIMONY**

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

12 A. Public Service Company of North Carolina, Inc., d/b/a/ PSNC Energy  
13 ("PSNC Energy" or the "Company") has retained me to analyze its current cost of  
14 capital and to recommend a rate of return that is appropriate in this proceeding. PSNC  
15 Energy, a local distribution company ("LDC") serving retail gas customers in central  
16 and western areas of North Carolina, is a wholly-owned subsidiary of SCANA  
17 Corporation ("SCANA").

18 Q. DID PSNC ENERGY'S AFFILIATE RELATIONSHIP WITH SCANA AFFECT  
19 YOUR ANALYSIS OF THE COST OF CAPITAL IN THIS PROCEEDING?

20 A. Yes. Because of the size and diversity of SCANA's overall business portfolio,  
21 I selected a group of LDCs to serve as proxy companies for PSNC Energy in my  
22 analysis. Therefore, this group of comparable companies was the focus of much of  
23 my analysis of the cost of capital of PSNC Energy in this proceeding. As SCANA is  
24 the parent of PSNC Energy and the source of equity funds, I also studied the financial

1 statistics and cost of equity of SCANA. I relied extensively on the measured costs of  
2 capital of the comparable LDCs because of their similarities to PSNC Energy.

3 Q. ARE YOU SPONSORING ANY EXHIBITS WITH YOUR TESTIMONY?

4 A. Yes. I am sponsoring an exhibit that I have attached to my testimony. This  
5 exhibit contains Schedules DAM-1 through DAM-26.

6 Q. WAS THIS EXHIBIT PREPARED EITHER BY YOU OR UNDER YOUR DIRECT  
7 SUPERVISION?

8 A. Yes, it was.

9  
10 **III. SUMMARY**

11 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

12 A. In order to analyze the current cost of capital and to recommend a rate of  
13 return and capital structure appropriate for PSNC Energy in this proceeding, I studied  
14 the current economic environment and the relevant financial characteristics of the  
15 Company. This included a determination of the appropriate capital structure and the  
16 cost of debt for this proceeding. I also reviewed relevant financial and market  
17 information and current levels of returns of LDCs. As market measures of the cost of  
18 common stock, I used two methods, the Discounted Cash Flow ("DCF") and Capital  
19 Asset Pricing Model ("CAPM") for my market analysis of the costs of common  
20 equity for PSNC Energy.

21 For example, I determined that the appropriate capital structure for PSNC  
22 Energy for this proceeding was 35.89 percent long-term debt, 10.36 percent short-  
23 term debt and 53.75 percent common equity. By studying the capital structure of

1 comparable LDCs, I noted that PSNC Energy's common equity ratio is relatively low  
2 and, therefore, relatively higher risk to the common equity holders than the capital  
3 structures of the comparable LDCs. PSNC Energy's cost of long-term debt  
4 appropriate for this proceeding is 7.07 percent. The appropriate cost of short-term  
5 debt is 3.55 percent.

6 As a measure of current market conditions, the average return on common  
7 stock for the proxy, comparable LDCs is currently 11.3 percent. The results of  
8 market-based methodologies for measuring the cost of common equity for the  
9 comparable group as proxies for PSNC Energy were varied. The most relevant DCF  
10 results, which were based on common stock earnings growth forecasts for the  
11 comparable LDCs, were 10.54 percent using current market prices and 10.94 percent  
12 using prices over a longer time period for PSNC Energy's common equity. I also  
13 developed two complementary CAPM methods. The most relevant CAPM results  
14 also were for the comparable LDCs. These results range between 12.52 percent and  
15 13.17 percent.

16 I put all of these results in an overall market context by noting relevant  
17 financial statistics and measures of financial and business risk. For the smaller LDCs,  
18 currently earning 11.3 percent with market-measured costs of equity spanning from  
19 approximately 10 percent to over 13 percent, I determined that the appropriate range  
20 for PSNC Energy is 11.50 percent to 12.00 percent. My recommended total cost of  
21 capital for PSNC Energy is in the range of 9.09 percent to 9.36 percent.

22 After determining the proposed range of common equity returns for PSNC  
23 Energy, I tested whether my recommended range of returns on common stock was

1 both sufficient and at the same time adequate for PSNC Energy to compete for funds.  
2 I compared the After-Tax Interest Coverage for the Company, at my recommended  
3 return range, to the current After-Tax Interest Coverage for the comparable, proxy  
4 LDCs. My recommended allowed return for PSNC Energy will result in an After-Tax  
5 Interest Coverage of a range of just 3.13 to 3.22 times. Even the highest of the tax  
6 coverages for PSNC Energy is much lower than the average After-Tax Interest  
7 Coverage of the comparable companies, which is currently 3.81 times. This confirms  
8 that my recommendation is very reasonable, or even very conservative. These  
9 coverage ratios further support going to the high end of my range, or 12.0 percent,  
10 and I recommend doing so in this proceeding. If anything, these coverages call into  
11 question whether my recommended allowed return will be sufficient to attract capital  
12 if the equity markets' volatility continues while the rates from this proceeding are in  
13 effect.

#### 14 15 **IV. UTILITY REGULATION**

16 Q. PLEASE EXPLAIN HOW REGULATORY POLICIES MAY HAVE AFFECTED  
17 YOUR ANALYSIS AND RECOMMENDATION OF THE COST OF CAPITAL IN  
18 THIS PROCEEDING.

19 A. I structured my analysis based on prevailing regulatory policies regarding the  
20 natural gas distribution industry. For example, economies of scale at the distribution  
21 level of utility service indicate that duplicating facilities can be economically  
22 inefficient. For this reason, analysts have long recognized the potential for market

1 power to exist in franchised utility markets, and this is the principal economic  
2 rationale for utility regulation.

3 Q. HOW DID THIS RATIONALE FOR UTILITY REGULATION INFLUENCE  
4 YOUR ANALYSIS AND RECOMMENDATIONS CONCERNING AN  
5 ALLOWED RETURN FOR PSNC ENERGY IN THIS PROCEEDING?

6 A. I recognized that a utility market structure and economic rationale implied that  
7 an allowed return for PSNC Energy should be sufficient to recover the costs of  
8 providing service, but at the same time, it should not be higher than necessary to  
9 attract and maintain capital. This was the objective of my analysis. I also believe that  
10 this analytical objective is consistent with my understanding of the legal standard of a  
11 “fair rate of return” in regulation.

12 Q. CAN YOU EXPLAIN WHAT YOU MEANT BY THE TERMS A “FAIR RATE OF  
13 RETURN” AND A “LEGAL STANDARD?”

14 A. When I used the term “fair rate of return,” I was referring to a return that  
15 meets the standards set by the United States Supreme Court decisions in *Bluefield*  
16 *Water Works and Improvement Company vs. Public Service Commission*, 262 U.S.  
17 679 (1923) (“*Bluefield*”) and *Federal Power Commission vs. Hope Natural Gas*  
18 *Company*, 320 U.S. 591 (1944) (“*Hope*”). As an economist, my understanding of  
19 these decisions is that they characterize a “fair rate of return” as one that provides  
20 earnings to investors similar to returns on alternative investments in companies of  
21 equivalent risk. Generally, a return is sufficient if it enables the company to operate  
22 successfully and provide utility services, attract capital, maintain its financial  
23 integrity, and compensate investors for the associated risks of investment.

1 V. ECONOMIC ENVIRONMENT

2 Q. WHAT ECONOMIC FACTORS ARE IMPORTANT TO YOUR ANALYSIS OF  
3 PSNC ENERGY'S COST OF CAPITAL IN THIS PROCEEDING?

4 A. Expectations regarding inflation and interest rates are major economic factors  
5 that influence investors' decisions. Generally, inflationary expectations cause the  
6 investors to require returns sufficient to compensate for any loss of purchase power  
7 over the life of a debt security. In many cases, this leads to higher long-term interest  
8 rates. Higher interest rates, in turn, lead to higher overall costs of capital. In the case  
9 of a regulated utility such as PSNC Energy, the regulatory environment is also a  
10 critical component of the business environment. Anticipated regulatory actions, as  
11 well as forecasts of inflation and interest rates, affect investors' expectations of utility  
12 returns and their evaluations of the risks and returns of alternative investments.

13 Q. HOW WOULD YOU DESCRIBE THE CURRENT ECONOMIC  
14 ENVIRONMENT?

15 A. The U.S. credit and capital markets are experiencing a tumultuous  
16 retrenchment spurred by a meltdown in the housing and mortgage markets, record  
17 high energy prices, accelerating inflation, and a contracting economy. In February  
18 2008, U.S. manufacturing fell at the fastest pace in almost five years and construction  
19 spending fell the most since 1994. The price of a barrel of oil hit an intraday record  
20 high price of over \$110 on March 13, 2008 and is currently at an inflation-adjusted  
21 all-time high price. The U.S. economy lost an unexpected 63,000 jobs in February  
22 2008 following a decline of 22,000 jobs in January 2008. Mortgage foreclosures rose  
23 to an all-time high at the end of 2007, and in the fourth quarter of 2007, home prices

1 fell 9 percent from a year earlier, the largest drop in the 20-years of keeping such  
2 records. Some economists predict home prices will drop another 10 percent.  
3 Furthermore, increases in the prices of food, energy, and prescription drugs have  
4 rekindled fears of accelerating inflation. The sharp decline in GDP is shown in  
5 Schedule DAM-1.

6 Q. HOW HAS THE FEDERAL RESERVE RESPONDED TO THESE MARKET  
7 CONDITIONS?

8 A. The Federal Open Market Committee ("FOMC") has slashed the target federal  
9 funds rate several times over the last several months to 2.25 percent from 4.50 percent  
10 three months ago and from 5.25 percent one year ago. However, the aggressive  
11 cutting of the federal funds and discount rates by the Fed has not resulted in lower  
12 long-term rates to consumers or businesses. As I show on Schedule DAM-2, rates for  
13 long-term Baa/BBB utility bonds have increased from 5.86 percent one year ago to  
14 6.39 percent today. Rates for A-rated utility bonds and A-rated industrial bonds have  
15 increased from 5.59 percent and 5.60 percent one year ago, respectively, to 6.26  
16 percent and 6.35 percent, respectively, today. Yields on agency mortgage-backed  
17 securities increased to a 22-year high relative to U.S. Treasuries as banks stepped-up  
18 margin calls. The spread between the agency and Treasury securities helps determine  
19 the rate homeowners pay on new prime mortgages of \$417,000 or less. Additionally,  
20 the world's top banks have reported \$181 billion in losses and write-downs as well as  
21 being stuck with over \$300 billion of leveraged buyout loans and structured  
22 investment vehicles, which hinders their ability to make new investments.



1 Q. HAS THE FEDERAL RESERVE EMPLOYED ANY EXCEPTIONAL POLICIES  
2 IN RESPONDING TO THESE MARKET CONDITIONS?

3 A. The Fed has injected emergency short-term funds into the market through a never  
4 before used Term Auction Facility ("TAF") to address "heightened liquidity pressures  
5 in term funding markets." The Fed has loaned \$160 billion in emergency funds since  
6 mid-December to increase the supply of funds available for lending. The Fed injected  
7 an additional \$100 billion through the March 10 and March 24 auctions. The TAF's  
8 began as a coordinated effort with the central banks of the United Kingdom, Canada,  
9 Switzerland, and the European Union to increase short-term funds after losses on sub  
10 prime mortgages unhinged normal bank lending practices.

11 Q. HAS THE FEDERAL RESERVE ADOPTED ANY OTHER EXTRAORDINARY  
12 POLICIES?

13 A. Yes. On March 11, 2008, the Fed announced another new vehicle, the Term  
14 Securities Lending Facility, to address the deepening crisis in the credit markets.  
15 Under this new program, the Federal Reserve will lend up to \$200 billion of Treasury  
16 securities to primary dealers to promote liquidity and to foster the functioning of the  
17 financial markets generally. On March 14, 2008, the Fed bailed out one of the largest  
18 investment banks in the world, Bear Stearns, using J.P. Morgan, another leading  
19 investment bank, as a conduit. Crisis in the credit and capital markets has increased  
20 risks to investors.

21 Q. WHAT ARE SOME OF THE CONSEQUENCES OF THE CURRENT ECONOMIC  
22 SITUATION?

1 A. Many policymakers are concerned that a slowing economy and accelerating  
2 inflation will bring a repeat of the stagflation as experienced in the 1970's. Forecasts  
3 for economic growth have decreased over the last several months while forecasts of  
4 inflation have gone up. *Blue Chip Financial Forecasts* ("*Blue Chip*") predicts real  
5 GDP growth of 0.1 percent in the current quarter and 0.6 percent in the second  
6 quarter of 2008 following a very low 0.6 percent growth rate in the fourth quarter of  
7 2007. The *Blue Chip* Consensus predicts 2.0 percent real GDP growth in the third  
8 quarter and 2.1 percent growth in the fourth quarter related to and following the fiscal  
9 stimulus package recently approved by Congress.

10 Q. WHY DID YOU USE *BLUE CHIP* INFORMATION AND FORECASTS IN YOUR  
11 ANALYSIS?

12 A. *Blue Chip* is a much respected publication that reports the consensus forecasts  
13 of forty-six leading financial forecasters. These consensus forecasts, and the  
14 predictions of the individual forecasters embodied in them, are available to  
15 knowledgeable investors. Consequently, these forecasts, which are from reliable  
16 sources, will affect many investors' decisions.

17 Q. YOU MENTIONED THE INFLATION RATE AS AN IMPORTANT FACTOR TO  
18 EXAMINE. WHAT ARE THE CURRENT INFLATION CONSIDERATIONS?

19 A. Analysts generally expect the consumer price index to increase at a 3.9  
20 percent annual rate in the first quarter of 2008 following an annualized increase of 5.1  
21 percent in the fourth quarter of 2007. It is then expected to increase at an annualized  
22 rate of approximately 2.5 percent for the remainder of 2008. However, it is worth  
23 noting that many analysts have underestimated the growth in consumer prices in

1 recent years as prices for food and energy have accelerated at high rates. Forecasts for  
2 core inflation, which exclude food and energy prices, are running at 2.3 percent to 2.5  
3 percent for 2008, which is above the Fed "comfort zone" of 1 percent to 2 percent.  
4 During Federal Reserve Board Chairman Benjamin Bernanke's semiannual  
5 Congressional testimony on monetary policy in February 2008, noting sharp  
6 continued increases in oil and food prices, he acknowledged that:

7 Core inflation...also firmed toward the end of last year. The higher recent  
8 readings likely reflected some pass-through of energy costs to the prices of  
9 core consumer goods and services as well as the effect of the depreciation of  
10 the dollar on import prices.  
11

12 Schedule DAM-3 illustrates the increasing inflationary pressures that are  
13 troubling to the financial markets and federal policymakers.

14 Q. YOU DISCUSSED SOME FACTORS CURRENTLY AFFECTING INTEREST  
15 RATES. WHAT ARE THE RECENT AND CURRENT LEVELS OF BOND  
16 RATES?

17 A. As shown on Schedule DAM-4, according to the Federal Reserve, the yields  
18 on 10-year Treasury bonds bottomed out in 2003. Currently, the 10-year Treasury  
19 rate, 30-year Treasury rate, and Baa-corporate rate are about 3.85 percent, 4.61  
20 percent, and 6.93 percent, respectively.

21 Q. WHAT IS THE FORECASTED LEVEL OF BOND INTEREST RATES?

22 A. Generally, analysts expect long-term bond rates to increase. The *Blue Chip*  
23 forecast increases from 4.3 percent to 4.8 percent for the 10-year Treasury rate into  
24 2009, as illustrated in Schedule DAM-5. *Value Line* provides a longer-term forecast  
25 for the 2010-12 period and also shows interest rate increases out to that period. I have  
26 shown this continued forecasted growth in interest rates in Schedules DAM-6.

1 Furthermore, despite the Federal Reserve's efforts to lower short-term rates, analysts  
2 expect longer term rates, the benchmark securities for utility returns, to increase, as I  
3 show in Schedule DAM-7.

4 Q. CAN YOU SUMMARIZE HOW THE ECONOMIC ENVIRONMENT WAS  
5 IMPORTANT TO YOUR ANALYSIS AND RECOMMENDATIONS IN THIS  
6 PROCEEDING?

7 A. The risks facing the credit and capital markets are significant. Banks are  
8 facing severe write-downs and impairments and have little room to extend credit amid  
9 rising losses. Decreasing asset prices are contributing to a "death-spiral" of margin  
10 calls followed by further sales of assets at decreased prices leading to asset value  
11 reductions and further margin calls. Energy prices are at or near all-time highs,  
12 inflation is accelerating, and the stock market has dropped almost 20 percent since the  
13 fall of 2007. Contemporaneously, utilities are facing increasing infrastructure and  
14 environmental requirements, increasing operating costs, and accelerating input costs.  
15 I considered this background throughout my analysis. The challenges facing the credit  
16 and capital markets compound the risks to capital-intensive utility companies. Rising  
17 inflation and rising interest rates erode earnings and adversely affect the cost of a  
18 utility's debt and equity, eroding utility margins. That is, despite the lowering of  
19 short-term rates, rising inflation and rising interest rates in the longer term increase  
20 the risk that common stockholders will not achieve their anticipated returns on  
21 investment.

1                                    **VI. SELECTION OF COMPARABLE COMPANIES**

2        Q.        YOU STATED THAT YOU USED A GROUP OF COMPARABLE LDCS AS  
3                    PROXY COMPANIES FOR PSNC ENERGY IN YOUR ANALYSIS. WHAT  
4                    CRITERIA DID YOU USE TO SELECT THE LDCS THAT YOU USED AS  
5                    PROXY COMPANIES TO PSNC ENERGY IN YOUR ANALYSIS?

6        A.                As an initial step, I identified criteria that were similar to the characteristics of  
7                    PSNC Energy. Then, for my analysis, I applied these criteria to a select group of  
8                    LDCs that met these criteria similar to PSNC Energy. First, I selected the comparable  
9                    companies from a group of primarily gas distribution companies reported on by *Value*  
10                  *Line*. These companies are all publicly traded utilities. Second, because of the  
11                  importance of size in determining the cost of capital of a utility, I limited the group of  
12                  distribution companies to firms with a market capitalization of less than \$1.7 billion.  
13                  Third, as a measure of financial health and similar investor expectations, I excluded  
14                  companies that do not pay a dividend. By selecting a group of publicly-traded LDCs  
15                  that are comparable to PSNC Energy with these various characteristics, I could use  
16                  them as suitable proxies for this analysis. This was an important analytical step  
17                  because PSNC Energy is not publicly traded.

18       Q.        WHAT COMPANIES DID YOU SELECT AS COMPARABLE, PROXY  
19                    COMPANIES FOR YOUR ANALYSIS OF PSNC ENERGY?

20       A.                The six LDCs that are similar to PSNC Energy are Laclede Group, New  
21                    Jersey Resources, Northwest Natural Gas, South Jersey Industries, Southwest Gas,  
22                    and WGL Holdings.

**VII. CAPITAL STRUCTURE**

Q. YOU INDICATED THAT YOU REVIEWED THE CAPITAL STRUCTURE THAT IS APPROPRIATE FOR PSNC ENERGY IN THIS PROCEEDING. WHAT CAPITAL STRUCTURE ARE YOU RECOMMENDING?

A. The capital structure components for PSNC Energy that are appropriate for this proceeding are short-term debt of 10.36 percent, long-term debt of 35.89 percent and common equity of 53.75 percent of total capital. I have illustrated this capital structure for this proceeding in Schedule DAM-8. Notably, I adopted the capital structure proposed by the Company, which includes short-term debt; however, in an earlier analysis, I concluded that short-term debt did not support the permanent capital of PSNC Energy at that time.

Q. YOU SAID THAT YOU THOUGHT IT WAS LIKELY THAT SHORT-TERM DEBT COULD NOT LOGICALLY SUPPORT PSNC ENERGY'S PERMANENT CAPITAL. WHY DID YOU STATE THAT?

A. On an earlier occasion, I reviewed the short-term borrowing patterns of PSNC Energy, and from the seasonal fluctuations, it was apparent that the company used short-term borrowings to support gas purchases. At that time, I concluded that fluctuating short-term debt did not provide financial support for multi-period, rate-base assets.

Q. WHAT ARE THE CONSEQUENCES OF INCLUDING SHORT-TERM DEBT IN PSNC ENERGY'S CAPITAL STRUCTURE IF IT DOES NOT, IN FACT, PROVIDE FINANCIAL SUPPORT FOR LONG-TERM ASSETS?

1 A. Because it normally is the lowest cost component of a utility's capital  
2 structure, including it in the permanent capital structure lowers the allowed total  
3 return to a level below the true cost of permanent capital. In this instance, the impact  
4 to PSNC Energy's cost of capital is likely to be important. A level of short-term debt  
5 of 10.36 percent is a relatively large short-term debt component for inclusion in an  
6 LDC's capital structure.

7 Q. IS THE CAPITAL STRUCTURE OF PSNC ENERGY THAT YOU ARE  
8 RECOMMENDING CONSISTENT WITH THE CAPITAL STRUCTURES OF  
9 THE COMPARABLE LDCS THAT YOU ARE USING AS PROXIES FOR  
10 ANALYSIS IN THIS PROCEEDING?

11 A. The common equity ratio of PSNC Energy is somewhat lower than the  
12 average common equity ratio of the comparable LDCs. For example, I compared the  
13 *Value Line* average common equity ratio for the LDCs with the common equity ratio  
14 of PSNC Energy in this proceeding. The common equity ratio average for the LDCs  
15 is currently 56.6 percent, which is higher than the common equity ratio of 53.75  
16 percent of PSNC Energy. Although this differential is not so great that it would create  
17 a very risky market environment, it assures that using the comparable LDCs as  
18 proxies for PSNC Energy is very conservative analytically. I have illustrated these  
19 comparisons of common equity ratios in Schedule DAM-9. I noted that the common  
20 equity ratio of SCANA as the parent of PSNC Energy is currently 47.0 percent  
21 according to *Value Line*, and this is significantly lower than the common equity ratio  
22 average of the comparable companies.

23

1                                   **VIII. THE COST OF SHORT-TERM DEBT**

2       Q.       WHAT DID YOU DETERMINE TO BE THE APPROPRIATE COST OF SHORT-  
3               TERM DEBT?

4       A.       PSNC Energy's workpapers showed that the relevant cost of short-term debt  
5               for this component that is relevant for this proceeding is 3.55 percent. The low cost of  
6               this component of PSNC Energy's capital structure, or 10.36 percent will have a  
7               measurable impact on the total cost of capital.

8  
9                                   **IX. COST OF LONG-TERM DEBT**

10      Q.       WHAT IS THE COST OF PSNC ENERGY'S LONG-TERM DEBT?

11      A.       The embedded weighted average cost of PSNC Energy's long-term debt as of  
12               December 31, 2007, is 7.07 percent.

13  
14                                  **X. FINANCIAL RISK**

15      Q.       YOU MENTIONED THAT YOU CONSIDERED THE "FINANCIAL RISKS"  
16               FACING COMMON EQUITY INVESTORS. PLEASE EXPLAIN WHAT YOU  
17               MEAN BY FINANCIAL RISK.

18      A.       Financial risk is the risk to a company's common stockholders that is a  
19               consequence of the company's use of financial leverage. This risk results from using  
20               fixed income securities to finance the firm. The return to common stockholders is a  
21               residual return because the income to common stockholders is available only after a  
22               company pays its debt holders. This means the return on common stock is less certain  
23               than the contracted return to debt holders. Consequently, the common stock equity



1 ratio is a measure of financial risk. The lower the common equity ratio, the greater the  
2 relative prior obligation owed to debt holders, and the greater the risk faced by  
3 common stockholders.

4 Q. YOU DEMONSTRATED THAT PSNC ENERGY'S COMMON EQUITY RATIO  
5 WAS LOWER THAN THE AVERAGE COMMON EQUITY RATIO OF THE  
6 LDCS THAT YOU USED AS PROXIES IN YOUR ANALYSIS. WAS THIS  
7 MEASURE OF FINANCIAL RISK SIGNIFICANT?

8 A. Yes. The analytical method that I used accentuated the difference between the  
9 53.75 common equity of PSNC Energy and the 56.6 percent of common equity for  
10 the comparable LDCs. This means that the comparable LDCs are conservative  
11 benchmarks as measures of the cost of capital of PSNC Energy.

12 Q. DID YOU IDENTIFY OTHER MEASURES OF FINANCIAL RISK THAT MIGHT  
13 BE IMPORTANT IN YOUR ANALYSIS OF THE COST OF CAPITAL?

14 A. Yes. I reviewed some measures that are influenced by the level of financial  
15 risk such as *Value Line's* "Financial Strength" measure and Standard & Poor's  
16 ("S&P's") "Credit Ratings."

17 Q. WHAT DID THIS REVIEW SHOW?

18 A. I have shown measures of risk for the comparable LDCs in Schedule DAM-  
19 10. As illustrated, *Value Line's* "Financial Strength" is A for three of the six  
20 comparable companies. S&P's "Business Position" measure for four of the  
21 comparable LDCs is A- or higher. From these independent measures of risk, I  
22 concluded that the proxy group was, in general, recognized as relatively financially  
23 healthy.

1

2

**XI. BUSINESS RISK**

3 Q.

4

5

YOU EXPLAINED THAT YOU INVESTIGATED THE "BUSINESS RISK" OF  
PSNC ENERGY DURING YOUR ANALYSIS. WHAT DO YOU MEAN BY THE  
TERM BUSINESS RISK?

6 A.

7

8

9

Business risk is the exposure of the returns to common stockholders that  
results from business operations. At this time, the unprecedented high natural gas  
prices are a constant source of threats to LDCs' margins, and this is a risk to common  
equity investors.

10 Q.

11

CAN YOU EXPLAIN IN MORE DETAIL THE POTENTIAL SOURCES OF  
BUSINESS RISKS TO LDCS?

12 A.

13

14

15

16

17

18

A common business risk to LDCs is the threat to operating margins resulting  
from generally declining sales because of such factors as price elasticity or customer  
by-pass. In today's gas markets, operating costs are increasing as a result of high gas  
costs, inflation, and borrowing costs and threatening margins expected by investors.  
High gas costs lead to increases in an LDCs' working capital, short-term debt costs,  
accounts receivable, and bad debt expenses. To the common equity investors, these  
added costs are a threat to sufficient returns to attract capital.

19 Q.

20

DO YOU BELIEVE THE BUSINESS RISKS FACING LDCS HAVE INCREASED  
RECENTLY?

21 A.

22

23

Yes. At the time of this testimony, natural gas prices are at extremely high  
levels. All customer groups will respond to high gas prices, and the manner in which  
investors will respond to these conditions, in an otherwise volatile equities market, is

unclear. This highlights the uncertainty and risk in this market.

Q. DID YOU REVIEW ANY COMPARABLE MEASURES OF BUSINESS RISK FOR PSNC ENERGY AND THE COMPARABLE COMPANIES?

A. Yes. I reviewed *Value Line's* measures of "Safety" and "Timeliness." Each of these measures is influenced by business risks, and for that matter regulatory risk, which one can think of as a sub-category of business risk. The Safety measure for the comparable companies ranges from "1" to "3," with a "1" being the highest and a "5" the lowest. The Safety ranking for the comparable LDCs is relatively strong. However, *Value Line* considers none of the comparable LDCs as better than an average "3" in Timeliness. I illustrate these rankings in Schedule DAM-11.

## XII. FINANCIAL STATISTICS

Q. YOU MENTIONED THAT YOU REVIEWED KEY FINANCIAL STATISTICS. WHAT FINANCIAL STATISTICS DID YOU REVIEW?

A. I reviewed common stock earnings, dividend histories and forecasts, dividend payouts and market-price earnings ratios for SCANA and the comparable LDCs.

Q. WHAT DID THE RECENT COMMON STOCK EARNINGS SHOW?

A. The comparable, proxy LDCs are currently earning 11.3 percent on common equity. LDCs are currently earning as much as 13 percent. I have shown these earnings on common equity in Schedule DAM-12. As this schedule also shows, the earnings for the comparable companies have been in this range for at least the past five years.

1 Q. WHAT DID YOU LEARN WHEN YOU REVIEWED THE LDCS DIVIDEND  
2 PAYOUT RATIOS?

3 A. The comparable LDCs currently have dividend payouts averaging 54.0  
4 percent. As Schedule DAM-13 shows, the dividend payout ratios of the comparable  
5 LDCs, which are generally the smaller utilities, has declined in recent years.

6 Q. WHAT DID YOUR REVIEW OF THE PRICE-EARNINGS RATIOS OF THE  
7 COMPARABLE COMPANIES SHOW?

8 A. I compared the common stock price-earnings ("P/E") ratios for the  
9 comparable LDCs over the past five years, and I did not detect a perceptible change  
10 in the overall market response to these companies. My Schedule DAM-14 shows the  
11 current average price-earnings ratio for the group of 16.2 times.

12

13 **XIII. COST OF COMMON STOCK**

14 Q. PLEASE EXPLAIN THE METHODOLOGIES THAT YOU USED IN YOUR  
15 ANALYSIS OF THE COST OF COMMON STOCK FOR PSNC ENERGY.

16 A. I used two common and accepted market-based analyses for estimating the  
17 cost of common stock in regulatory proceedings, namely the DCF and the CAPM  
18 methods. In each case, I applied these models to the group of comparable companies  
19 as analytical surrogates for PSNC Energy. I also estimated similar costs for SCANA,  
20 which as the parent for PSNC Energy, is its source of funds. When developing these  
21 analyses, I reviewed the underlying assumptions of each method to determine that  
22 they were met satisfactorily. I also reviewed academic literature related to the use of  
23 these two methods. I specifically evaluated the relative strengths and weaknesses of

1 these models and interpreted the results in this context. I also evaluated the results in  
2 the context of current market conditions.

3  
4 **XIV. DISCOUNTED CASH FLOW METHOD**

5 Q. PLEASE DEFINE THE DCF METHODOLOGY THAT YOU USED TO  
6 MEASURE THE COST OF COMMON EQUITY?

7 A. Analysts commonly express the DCF calculation of the investor's required  
8 rate of return by the following formula:

9 
$$K = D/P + g$$

10 Where: K = cost of common equity  
11 D = dividend per share  
12 P = price per share and  
13 g = rate of growth of dividends, or alternatively, common  
14 stock earnings.  
15

16 In this expression, K is the capitalization rate required to convert the stream of  
17 future returns into a current value.

18 Q. YOU STATED THAT YOU CONFIRMED THAT THE UNDERLYING  
19 ASSUMPTIONS OF THE COST OF CAPITAL MODELS THAT YOU USED  
20 WERE MET. WHAT ASSUMPTIONS UNDERLYING THE DCF METHOD ARE  
21 IMPORTANT WHEN ESTIMATING THE COST OF COMMON STOCK EQUITY  
22 IN PRACTICE?

23 A. The following are important underlying assumptions associated with the basic  
24 annually compounded DCF model:

- 25 1. Investors are risk averse. That is, for a given return, investors will seek  
26 the alternative with the lowest amount of risk. In other words, the  
27 greater the risk that investors assume, the greater the return they will  
28 require from that investment.

2. The discount rate must exceed the growth rate, i.e.  $K$  must exceed  $g$ . The mathematics associated with the derivation of the basic annually compounded DCF model requires this assumption.
3. The payout and the price earnings ratios remain constant.
4. Expected cash flows consist of dividends and the future sale price of the stock. The sales price in any period will equal the present value of the dividends and the sales price expected after that period including any liquidating dividend. Consequently, the sales price in any period is equal to the present value of all expected future dividends.
5. Dividends are paid annually.
6. There is no external financing.

As noted in these assumptions, and the stated definitional expression, expected cash flows consist of dividends and the future sale price of the stock, although, of course, earnings drive both.

#### **XV. STRENGTHS OF THE DCF**

Q. YOU STATED THAT YOU REVIEWED THE STRENGTHS AND WEAKNESSES OF THE TECHNIQUES YOU USED. WOULD YOU IDENTIFY THE KEY STRENGTHS OF THE DCF THAT YOU THINK ARE IMPORTANT TO YOUR ANALYSIS?

A. Yes. The DCF method is theoretically sound, and this is probably its greatest strength. It relates an investor's expected return in the form of dividends and capital gains to the value an investor is willing to pay for those returns. This implies that an investor is willing to pay a market price equal to the present value of an anticipated stream of earnings. This relationship reveals the opportunity cost of investors' funds. A practical advantage of the DCF as a cost of capital in a ratemaking proceeding is

1 that regulatory analysts commonly use it, and participants in proceedings are  
2 generally familiar with it.

3 Q. IS THE DCF ESTIMATE OF THE COST OF COMMON EQUITY CONSISTENT  
4 WITH THE REGULATORY OBJECTIVE OF SETTING AN ALLOWED RETURN  
5 EQUAL TO THE RETURNS OF EQUIVALENT RISK?

6 A. Yes. The DCF develops an estimate of the marginal cost of investing in a  
7 given utility. This is consistent conceptually with the principle of setting a return  
8 equal to returns of equivalent risk. This cost of capital, however, is not necessarily  
9 sufficient to assure that a return at this level attract and maintain capital even in the  
10 very near term.

11  
12 **XVI. WEAKNESSES OF THE DCF**

13 Q. WHAT WEAKNESSES OF THE DCF MAY BE IMPORTANT WHEN USED IN A  
14 RATEMAKING PROCEEDING?

15 A. A DCF analysis may have either conceptual or data problems or both. As to  
16 the conceptual problems, analysts may misinterpret and consequently misapply the  
17 DCF because they do not understand the limits of the analysis. For example, a  
18 common conceptual problem is to use historical growth rates in DCF calculations  
19 when these rates are not accurate estimates of investors' expectations of the future  
20 returns. Likewise, using dividend growth rates mechanically in a DCF formulation  
21 will be misleading if investors are purchasing and selling a stock because of  
22 anticipated changes in earnings and potential capital gains. That is, if an assumption

1 (such as dividends being the sole source of value expectations of an investor) is not  
2 accurate, then analysts will err if they do not recognize this.

3 Also, as I stated previously, the DCF method calculates the marginal, or  
4 incremental, cost of common stock equity of a company. If analysts do not recognize  
5 the theoretical significance of this calculation, they may misapply the results of their  
6 calculations. As a marginal cost estimate, the DCF produces an estimate of the  
7 minimal return necessary to attract or maintain investment funds in a company's  
8 common stock equity.

9 Q. FROM A PRACTICAL STANDPOINT, WHY IS THE MARGINAL COST  
10 NATURE OF THE DCF SIGNIFICANT IN A REGULATORY SETTING?

11 A. If a DCF-based cost of common equity, even if realistically developed,  
12 becomes the allowed return for a regulated utility, this will not provide enough  
13 cushion so the realized return will be sufficient to attract and maintain capital.  
14 Analysts interpreting the results of the DCF calculations may not recognize this.  
15 Consequently, the DCF-based calculations may be misleading. In fact, this  
16 misunderstanding of the DCF results can virtually assure that a regulated company  
17 will not have the opportunity to earn its allowed return.

18 Q. ARE YOU AWARE IF REGULATORY COMMISSIONS RECOGNIZE THESE  
19 LIMITATIONS OF THE DCF?

20 A. Yes. Regulatory commissions have recognized the difficulties of relying on  
21 the raw, unadjusted DCF calculations. In one such example, a regulatory commission



1 recognized that the assumptions underlying the DCF model rarely, if ever, hold true.<sup>1</sup>

2 This commission stated that an "...unadjusted DCF result is almost always well  
3 below what any informed financial analyst would regard as defensible and therefore  
4 requires an upward adjustment based largely on the expert witness' judgment."<sup>2</sup>

5 Q. IN ADDITION TO AN ADJUSTMENT BASED ON "EXPERT" JUDGMENT, IN  
6 YOUR EXPERIENCE, ARE YOU AWARE OF REGULATORS AND ANALYSTS  
7 ATTEMPTING TO COMPENSATE FOR THE MARGINAL COST NATURE OF  
8 THE DCF?

9 A. Yes. Both regulators and analysts have often applied compensating  
10 adjustments for the marginal cost nature of the DCF, and they do so in a variety of  
11 ways. Although these various adjustments may differ greatly in their approaches,  
12 each addresses the inadequacy of the marginal cost estimates of the cost of capital in  
13 some manner. For example, I have observed such practices as applying a "flotation"  
14 adjustment, a "market pressure" adjustment, or an adjustment to common equity to  
15 reflect the market values of debt and equity.

16 Q. YOU SAID A "FLOTATION ADJUSTMENT" IS ONE WAY THAT ANALYSTS  
17 ADDRESS THE MARGINAL COST NATURE OF THE DCF. WOULD YOU  
18 EXPLAIN WHY THIS IS THE CASE?

19 A. Yes. Analysts apply a flotation adjustment because the market-based DCF  
20 estimate of the cost of capital does not account for the costs of issuing common stock.  
21 That is, the market-based DCF does not incorporate the unavoidable costs incurred

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<sup>1</sup> Phillips, Charles F., Jr. and Robert G. Brown, *Chapter 9: The Rate of Return*, The Regulation of Public Utilities: Theory and Practice, (1993: Public Utility Reports, Arlington, VA) p. 423.

<sup>2</sup> Ibid, *In re Indiana Michigan Power Company*, 116 PUR4th 1, 17 (Ind. 1990).

1       when issuing securities, such as legal fees, investment banker fees, and the  
2       publication costs of a prospectus. The flotation adjustment attempts to raise the  
3       market-measured cost of capital, which is the return required to attract the marginal  
4       investor, to the same level as the true cost of capital of the utility.

5   Q.   DID YOU APPLY A FLOTATION ADJUSTMENT IN YOUR DCF ANALYSIS?

6   A.       No, I did not.

7   Q.   IF A UTILITY INCURS FLOTATION COSTS THAT REDUCE THE LEVEL OF  
8       FUNDS RECEIVED FROM A STOCK ISSUANCE, WHY DID YOU NOT APPLY  
9       SUCH AN ADJUSTMENT?

10  A.       Although the costs of flotation are inescapable and real, I believe it is an  
11       adequate recognition of the marginal cost nature of the DCF, which also recognizes  
12       the potential impact of flotation costs, to focus on the higher end of the varied DCF  
13       results. In my opinion, this normally provides appropriate compensation to attract and  
14       maintain investment in a utility's common stock, and it also avoids trying to exact a  
15       level of implied precision from the DCF methodology that is not realistic.

16  Q.   WHAT IS A "MARKET PRESSURE" ADJUSTMENT?

17  A.       A market pressure adjustment is a compensation for the impact of a common  
18       stock issuance on the prices of that common stock. Analysts apply this adjustment  
19       because the DCF measured cost of common stock cannot account for the prospective  
20       price impact of additional, newly issued shares. This is another instance when the  
21       marginal cost of common stock measured prior to its issuance will fail to capture the  
22       true cost of capital necessary to attract investors.

1 Q. ARE YOU RECOMMENDING THAT AN ANALYST SHOULD ADD A  
2 MARKET PRESSURE ADJUSTMENT TO A DCF RESULT WHEN  
3 DETERMINING A RECOMMENDED ALLOWED RETURN?

4 A. No. Normally, the higher end of the DCF market-based results will provide an  
5 adequate return on common stock for a regulated utility, which is sufficient under  
6 most market circumstances. Such a return should be adequate to compensate for the  
7 impact of newly issued securities and to attract investors to newly issued common  
8 stock.

9 Q. YOU MENTIONED AN ADJUSTMENT TO THE COST OF EQUITY TO  
10 REFLECT MARKET VALUES FOR DEBT AND EQUITY?

11 A. Regulatory convention dictates that an analyst uses the book values of  
12 securities when establishing the capital structure of a utility for ratemaking. Some  
13 analysts adjust the cost of equity for ratemaking to compensate for the difference  
14 between market value and book value. If market value is greater than book value, and  
15 regulatory convention dictates applying the marginal cost of capital to book value, the  
16 market price will decline toward book value. Of course, investors must measure the  
17 marginal cost returns against the market values of their investment. Some analysts  
18 recognize and adjust for the difference between market valuation and book valuation  
19 of common stock, which is another manner to compensate for the marginal cost  
20 nature of the DCF method.

21 Q. IN YOUR ANALYSIS OF PSNC ENERGY'S CAPITAL STRUTURE, DID YOU  
22 ADJUST THE COMMON EQUITY FOR THE DIFFERENTIAL IN MARKET  
23 VALUE AND BOOK VALUE?

1 A. No, I did not.

2

3 **XVII. DATA FOR THE DCF ANALYSIS**

4 Q. ARE YOU AWARE OF STUDIES REGARDING DATA USED IN A DCF  
5 ANALYSIS THAT ARE MORE LIKELY TO PRODUCE RELIABLE ESTIMATES  
6 OF THE COST OF CAPITAL?

7 A. Yes. Academic studies have shown that, in most instances, analysts' forecasts  
8 are superior to historically trended growth rates as predictors of growth rates for DCF  
9 analyses. Analysts' forecasts are more likely than historical information to reflect  
10 investors' expectations at the time they make their investment decisions.

11 Q. PLEASE CITE SOME OF THE STUDIES REGARDING THE VALUE OF USING  
12 ANALYSTS' FORECASTS IN DCF STUDIES.

13 A. A number of authors have addressed the merits of analysts' forecasts in a DCF  
14 analysis of the cost of capital. For example, a well-known financial textbook, by  
15 Brigham and Gapenski, argues that financial analysts' growth rate forecasts are the  
16 best source for growth measures in a DCF analysis. They state:

17 Analysts' growth rate forecasts are usually for five years into the future, and  
18 the rates provided represent the average growth rate over the five-year  
19 horizon. Studies have shown that analysts' forecasts represent the best source  
20 for growth for DCF cost of capital estimates.<sup>3</sup>

21  
22 Some other research reported in the academic literature supports this position. For  
23 example, Gordon, Gordon and Gould found:

24 ...the superior performance by KFRG (forecasts of growth by security  
25 analysts) should come as no surprise. All four estimates of growth rely upon

---

<sup>3</sup> Brigham, Eugene F., Louis C. Gapenski, and Michael C. Ehrhardt, "Chapter 10: The Cost of Capital," Financial Management Theory and Practice, Ninth Edition (1999: Harcourt Asia, Singapore), p. 381.

1 past data, but in the case of KFRG a larger body of past data is used, filtered  
2 through a group of security analysts who adjust for abnormalities that are not  
3 considered relevant for future growth.<sup>4</sup>  
4

5 As to the use of the DCF in utility regulatory proceedings, Timme and  
6 Eisemann examined the effectiveness of using analysts' forecasts rather than  
7 historical growth rates. They concluded:

8 The results show that all financial analysts' forecasts contain a significant  
9 amount of information used by investors in the determination of share prices  
10 not found in the historical growth rate....The results provide additional  
11 evidence that the historical growth rates are poor proxies for investor  
12 expectations; hence they should not be used to estimate utilities' cost of  
13 capital.<sup>5</sup>  
14

15 Q. WHAT HAS BEEN THE RECENT RELATIONSHIP BETWEEN COMMON  
16 STOCK EARNINGS AND DIVIDEND GROWTH FOR LDCS?

17 A. In recent years, dividends have grown more slowly than earnings per share  
18 generally for the LDCs. As a group, the comparable companies have experienced a  
19 5.00 percent growth in common equity earnings while dividends have grown just 2.17  
20 percent over the past five years. I have illustrated these relative growth rates in  
21 Schedule DAM-15. *Value Line* also projects that dividend growth will continue to  
22 trail the earnings growth.

23 Q. DO YOU KNOW WHY RECENT DIVIDEND GROWTH HAS TRAILED  
24 EARNINGS PER SHARE GROWTH FOR THESE LDCS?

25 A. I cannot be certain as to why boards of directors have raised dividends at rates  
26 lower than the growth in earnings per share. However, increasing business risks to

---

<sup>4</sup> Gordon, David A., Myron J. Gordon, and Lawrence I. Gould, "Choice among methods of estimating share yield," *Journal of Portfolio Management*, Spring 1989, Volume 15, Number 3, pages 50-55.

<sup>5</sup> Timme, Stephen G. and Peter C. Eisemann, "On the Use of Consensus Forecasts of Growth in the Constant Growth Model: The Case of Electric Utilities," *Financial Management*, Winter 1989, pp. 23-35.

1 LDCs undoubtedly cause boards of directors to take more conservative postures and  
2 reserve cash. This policy would be consistent with my earlier observations about  
3 business risks. In the recent market environment, this slower growth in dividends  
4 could be a conservative, prudent policy.

5 Q. IS THE LOWER DIVIDEND GROWTH RATE IMPORTANT TO YOUR DCF  
6 ANALYSIS?

7 A. Yes. The dividend growth rate does not capture the potential for capital gains,  
8 which may interest some investors. Consequently, for these companies, a DCF  
9 calculation based on an understated dividend growth rate will underestimate the  
10 market cost of capital.

11 Q. HOW DID YOU DETERMINE COMMON STOCK PRICES FOR YOUR DCF  
12 ANALYSIS?

13 A. In order to develop current market-based cost of capital estimates for PSNC  
14 Energy, I studied recent prices for the proxy, comparable LDCs. I selected price  
15 information from *YAHOO! Finance* for a recent two-week period for this analysis.  
16 Because utility rates set in this proceeding will be in effect for a number of years, I  
17 also took a longer view regarding market prices and developed price information  
18 from *YAHOO! Finance* for the past year. As a comparison, I developed similar  
19 market price information for SCANA.  
20  
21

**XVIII. DCF CALCULATIONS**

2 Q. PLEASE EXPLAIN YOUR DCF ANALYSES.

3 A. I first studied both the historical and forecasted dividend growth rates for the  
4 comparable LDCs. Because of their low dividend growth rates, the DCF results based  
5 on dividend growth rates were extremely low. For example, the current high DCF  
6 result based on dividend growth was only 7.130 percent. This is approximately the  
7 current yield on the lower risk Baa corporate bonds, and obviously, this is not a  
8 reasonable measure of the cost of equity for PSNC Energy. I show the DCF results  
9 based on using prices from the two different time periods in Schedule DAM-16 and  
10 Schedule DAM-17.

11 Q. YOU ALSO MENTIONED THAT YOU DEVELOPED DCF ANALYSES USING  
12 COMMON EQUITY EARNINGS GROWTH RATES. WHAT WERE THE  
13 RESULTS OF THESE ANALYSES?

14 A. I developed two alternative DCF analyses using common equity earnings  
15 growth rates. One analysis used recent prices and the other used prices from over a  
16 relatively long time period. As I said previously, a DCF calculation based on earnings  
17 growth is necessary to capture the value of capital gains to an investor. For one set of  
18 common equity estimates, I combined the historical and forecasted earnings per share  
19 growth rates. This produced more credible DCF results for the comparable  
20 companies. These were 10.54 percent and 10.94 percent for the comparable  
21 companies for the higher end of the DCF estimates. I have illustrated these  
22 calculations in Schedule DAM-18 and Schedule DAM-19.

1 Q. IN YOUR DCF ANALYSIS OF THE COMPARABLE COMPANIES, WHAT  
2 WERE THE RESULTS RELYING ON JUST COMMON EQUITY EARNINGS  
3 GROWTH FORECASTS?

4 A. Using the forecasted earnings per share growth rate and the longer and recent  
5 time periods, the high-end DCF estimates for the comparable LDCs were 9.65 percent  
6 and 10.04 percent. I have illustrated the results of these calculations in Schedule  
7 DAM-20 and Schedule DAM-21.

8

9 **XIX. CAPITAL ASSET PRICING MODEL**

10 Q. YOU STATED THAT YOU USED THE CAPITAL ASSET PRICING MODEL IN  
11 YOUR ANALYSIS. WHAT IS THE CAPITAL ASSET PRICING MODEL?

12 A. The CAPM is a risk premium method that measures the cost of capital based  
13 on an investor's ability to diversify by combining securities of various risks into an  
14 investment portfolio. It measures the risk differential, or premium, between a given  
15 portfolio and the market as a whole. The diversification of investments reduces the  
16 investor's total risk. However, some risk is non-diversifiable, e.g., market risk, and  
17 investors remain exposed to that risk. The theoretical expression of the CAPM model  
18 is:

19 
$$K = R_F + \beta (R_M - R_F)$$

20 Where: K = the required return  
21  $R_F$  = the risk-free rate  
22  $R_M$  = the required overall market return  
23  $\beta$  = beta, a measure of a given security's risk relative to that of the  
24 overall market.  
25



In this expression, the value of market risk is the differential between the market rate and the “risk-free” rate. Beta is the measure of the volatility, as a measure of risk, of a given security relative to the risk of the market as a whole. By estimating the risk differential between an individual security and the market as a whole, an analyst can measure the relative cost of that security compared to the market as a whole.

## XX. STRENGTHS OF THE CAPM

**Q. WHAT ARE THE NOTABLE STRENGTHS OF THE CAPM METHOD?**

The CAPM is a risk premium method that typically provides a longer-term perspective of capital costs than more market sensitive methods such as the DCF. The CAPM relates current debt costs to the cost of common stock by linking the incremental cost of capital of an individual company with the risk differential between that company and the market as a whole. Although it is a less refined calculation than the DCF, it is a valuable tool for assessing the general level of the cost of a security. The DCF estimates are more sensitive to changes in market prices and earnings, and hence more volatile, than the CAPM estimates. Also, the CAPM will typically produce relatively similar results for companies in the same industry, whereas, the DCF method may produce wide-ranging calculations even among companies in the same industry.



1 firm and its price-earnings ratio. He found that small firms experienced average  
2 returns greater than those of large firms which had equivalent risk as measured by the  
3 beta. Of course, the beta is the distinguishing measure of risk in the CAPM. Banz  
4 confirmed that beta does not explain all of the returns associated with smaller  
5 companies; hence, the CAPM would understate their cost of common equity. In the  
6 same time frame, Fama and French confirmed that the Banz analysis consistently  
7 rejected the central CAPM hypothesis that beta sufficed to explain the expected return  
8 of investors.<sup>8</sup>

9 Q. WHAT DID YOU MEAN WHEN YOU SAID THAT THE CAPM METHOD  
10 REQUIRES A SIZE ADJUSTMENT?

11 A. Although repeated studies showed that the CAPM method possesses a bias  
12 that understates the expected returns of small companies, for several years, this  
13 remained an empirical observation without a clear remedy. However, Ibbotson  
14 Associates, which is now Morningstar, developed an adjustment for this bias.  
15 Furthermore, Morningstar is the common source of data for the risk premium used in  
16 CAPM analyses. Morningstar discussed the size bias in the CAPM, as follows:

17 One of the most remarkable discoveries of modern finance is that of the  
18 relationship between firm size and return. The relationship cuts across the  
19 entire size spectrum but is most evident among smaller companies, which  
20 have higher returns on average than larger ones. Many studies have looked at  
21 the effect of firm size on return.<sup>9</sup>

22  
23 Q. IS THE SIZE BIAS IMPORTANT IN YOUR ANALYSIS OF THE COST OF  
24 CAPITAL OF PSNC ENERGY?

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<sup>8</sup> Fama, Eugene F., and Kenneth R. French, "The CAPM is Wanted, Dead or Alive," *The Journal of Finance*, Vol. LI, No. 5, pp. 1947-1958.

<sup>9</sup> Chapter 7: Firm Size and Return, "Morningstar Stocks, Bonds, Bills, and Inflation: 2007 Yearbook Valuation Edition," edited by James Harrington, p. 129.

1 A. Yes. In this instance, the LDCs are relatively small compared to all of the  
2 companies represented in the equities markets, and the size bias, or alternatively the  
3 adjustment necessary to adjust for this bias, is significant.

4 Q. ARE YOU CERTAIN THAT AN ANALYST SHOULD APPLY THE CAPM SIZE  
5 PREMIUM WHEN ESTIMATING THE COST OF COMMON EQUITY OF A  
6 REGULATED UTILITY?

7 A. Yes. In fact, Ibbotson Associates, now Morningstar, used an electric utility as  
8 an example to illustrate how to apply the size premium when developing a CAPM. I  
9 have included a page from that publication as my Schedule DAM-22.

10 Q. ARE YOU AWARE OF ANY REGULATORY COMMISSIONS THAT HAVE  
11 ACCEPTED THIS SIZE ADJUSTMENT TO THE CAPM IN UTILITY RATE  
12 PROCEEDINGS?

13 A. Yes. The Minnesota Public Utilities Commission has done so in an Interstate  
14 Power and Light Company case. The Commission observed:

15 ...the Commission concurs with the Administrative Law Judge in his  
16 conclusion that, whatever the merits and applicability of the Ibbotson study,  
17 for purposes of this case, it is reasonable to accept its principal conclusion –  
18 that size of a firm is a factor in determining risk and return.<sup>10</sup>  
19  
20

21

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<sup>10</sup> *In the Matter of the Petition of Interstate Power and Light Company for Authority to Increase its Electric Rates in Minnesota*, Docket No. E-001/GR-03-767, p. 12.

1 **XXII. CAPM METHODOLOGY**

2 Q. PLEASE EXPLAIN THE CAPM METHODOLOGY THAT YOU USED IN YOUR  
3 ANALYSIS.

4 A. I applied two different, but complementary, approaches to estimate a CAPM  
5 cost of capital. One of these methods examines the historical risk premium of  
6 common stock over high grade corporate bonds. The other integrates the risk  
7 premium of common stocks to long-term government bonds in recent markets. This  
8 second method requires an adjustment for the bias because of company size. As I  
9 stated, this method for compensating for the size bias is a relatively recent analytical  
10 development, and I presented the explanation of how to apply this adjustment  
11 previously.

12 Q. IN YOUR ANALYSIS, DID YOU APPLY THE ADJUSTMENT  
13 RECOMMENDED BY MORNINGSTAR OR IBBOTSON ASSOCIATES?

14 A. Yes. In my CAPM analysis, for the method requiring a size adjustment, I  
15 followed the approach that I discussed and presented previously.

16  
17 **XXIII. CAPM RESULTS**

18 Q. PLEASE EXPLAIN THE RESULTS OF YOUR CAPM ANALYSIS?

19 A. The results of my two different CAPM analyses for the comparable LDCs are  
20 12.52 percent and 13.17 percent. I have illustrated these calculations in Schedules  
21 DAM-23 and DAM-24. Because I used the comparable LDCs as proxies for PSNC  
22 Energy, these are the relevant CAPM results for this proceeding.

**XXIV. TARIFF PROVISIONS**

1  
2 Q. DID YOU CONSIDER HOW ANY TARIFF PROVISIONS SUCH AS THE  
3 CUSTOMER USAGE TRACKER SHOULD AFFECT YOUR RETURN  
4 RECOMMENDATION?

5 A. Yes, I did. To the extent that a tracker affects potential and actual investors'  
6 expectations, it may reduce the risk they perceive. However, the methodology that I  
7 followed to estimate the cost of capital of PSNC Energy would require special  
8 compensation for the Company, only so far as it was distinguishable from similar  
9 provisions in the tariffs of the comparable LDCs. Furthermore, the distinctions must  
10 be necessarily known to and understood by potential investors. From the information  
11 available to me, I think such a distinction would be very small, if there is any at all.

12 Q. WHY DID YOU SAY "SUCH A DISTINCTION WOULD BE VERY SMALL, IF  
13 AT ALL?"

14 A. First, investors are not likely to perceive much change to the risk to equity  
15 returns from a prospective change in rate design. Any change to investor expectations  
16 will undoubtedly occur after implementation and history of a proposed rate design  
17 change. Second, other LDCs have various rate trackers, and investors are more likely  
18 to notice the consequences of these rate designs than they are the distinguishing  
19 characteristics among them.

20 Q. YOU RELIED ON THE COMPARABLE COMPANIES IN YOUR ANALYSIS.  
21 DOES THE CUSTOMER USAGE TRACKER FOR PSNC ENERGY PRESENT  
22 ANY SPECIAL METHODOLOGICAL PROBLEMS?

23 A. No. I have analyzed the cost of capital of the group of LDCs as proxies for

1 PSNC Energy. Consequently, I reviewed the tariffs of the comparable LDCs. Finding  
2 that many of the comparable LDCs have provisions in their tariffs that are likely to  
3 have similar impacts on potential investors' perceptions of business risk, I believe  
4 that little or no special compensation in the allowed return is merited. In fact, the  
5 most telling consequence to investors will undoubtedly be after the fact. If investors  
6 perceive any significant change in risk, as is the case with any business risk, this will  
7 affect their future investment decisions.

8 Q. WHAT WERE SOME OF THE RELEVANT FINDINGS THAT YOU NOTED  
9 WHEN YOU REVIEWED THE TARIFFS OF THE COMPARABLE LDCS?

10 A. I found potentially relevant provisions that might have more-or-less similar  
11 effects on potential investors. For example, in Laclede Gas' 2007 rate case, the  
12 Missouri Public Service Commission approved rate design changes allowing Laclede  
13 Gas to better ensure the recovery of the utility's fixed costs and margins despite  
14 variations in sales volumes due to the impact of weather and other factors that affect  
15 customer usage.<sup>11</sup> New Jersey Natural Gas has a Conservation Incentive Program  
16 (CIP) and a Weather Normalization Clause (WNC).<sup>12</sup> The Oregon Public Utility  
17 Commission renewed Northwest Natural Gas' Conservation Tariff and Weather  
18 normalization mechanism.<sup>13</sup> South Jersey Natural Gas has a tariff that provides for a  
19 Temperature Adjustment Clause (TAC) and a Conservation Incentive Program  
20 (CIP).<sup>14</sup> The California division of Southwest Gas has the Core Fixed Cost  
21 Adjustment Mechanism (CFCAM), which accounts for weather deviations from

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<sup>11</sup> Laclede Group 2007 10-K Report, page 24.

<sup>12</sup> New Jersey Resource 2007 10-K Report, page 3-4.

<sup>13</sup> Northwest Natural Gas 10-Q Report for the Quarter Ending September 30, 2007, page 19.

<sup>14</sup> South Jersey Industries 10-Q Report for the Quarter Ending September 30, 2007, page 22.

1 normal and customer conservation.<sup>15</sup> Washington Gas Light has the Revenue  
2 Normalization Adjustment (RNA) billing mechanism in Maryland, designed to  
3 stabilize the level of net revenues collected by eliminating the effect of deviations in  
4 customer usage caused by variations in weather from normal levels and other factors  
5 such as conservation.<sup>16</sup> Although investors are not likely to distinguish among such  
6 tariff provisions prior to acquiring any earnings history, these various provisions'  
7 existence underscores the appropriateness of my methodology using the comparable  
8 LDCs as proxies for PSNC Energy.

9  
10 **XXV. RECOMMENDED RETURN**

11 Q. WHAT DID YOU DO TO DETERMINE A RECOMMENDED ALLOWED  
12 RETURN ON COMMON STOCK FOR PSNC ENERGY?

13 A. As a point of reference methodologically, I determined that the common  
14 equity requested by the Company in this proceeding is lower than the common equity  
15 for the benchmark comparable LDCs. This means that relying upon the results of the  
16 comparable LDCs to determine the cost of common equity for PSNC Energy is  
17 conservative. Critical background assumptions for my recommendation are persistent  
18 inflationary pressures, capital flight to quality and, despite the Federal Reserve  
19 actions to lower short-term interest rates, high and forecasted rising long-term rates.

20 Significantly, the current average common stock earnings of the comparable  
21 LDCs is 11.3 percent. The market-based estimated cost of capital for the proxy LDC  
22 group varied considerably. The results from relevant DCF calculations ranged

---

<sup>15</sup> Cal. PUC Sheets 6001-G and 6559-G.

<sup>16</sup> WGL Holdings 10-Q Report for the Quarter Ending December 31, 2007, page 35.



1       between 10.54 percent and 10.94 percent. The relevant CAPM results were 12.52  
2       percent and 13.17 percent. I took special note of the current levels of common equity  
3       earnings of the LDCs and the lower of the two CAPM estimates.

4   Q.   YOU DEVELOPED SIMILAR ESTIMATES OF COSTS OF CAPITAL FOR  
5       SCANA THROUGHOUT YOUR ANALYSIS. HOW DID THE RESULTS OF  
6       YOUR INVESTIGATION OF THE CAPITAL COSTS OF SCANA AFFECT  
7       YOUR DETERMINATION OF THE COST OF CAPITAL OF PSNC ENERGY?

8   A.       At every step in the analysis, I found that the results for SCANA corroborated  
9       the analyses for the comparable utilities. Obviously, if the results between SCANA  
10      and the comparable companies were illogical and inconsistent this would cast some  
11      doubt upon the analysis; however, this was not the case.

12  Q.   WHAT IS YOUR RECOMMENDED RETURN ON COMMON STOCK EQUITY  
13       FOR PSNC ENERGY IN THIS PROCEEDING?

14  A.       I am recommending an allowed return for PSNC Energy in this proceeding in  
15       the range of 11.5 to 12.0 percent. Recognizing that the common equity of PSNC  
16       Energy is less than the average of the benchmark, comparable LDCs, this is  
17       reasonable.

18  Q.   WHAT IS THE TOTAL COST OF CAPITAL THAT YOU ARE  
19       RECOMMENDING FOR PSNC ENERGY IN THIS PROCEEDING?

20  A.       At my recommended capital structure, my recommended allowed return on  
21       common equity range of 11.5 percent to 12.0 percent with a cost of short-term debt of  
22       3.55 percent and a cost of long-term debt of 7.07 percent will produce a range of total

1 cost of capital from 9.09 percent to 9.36 percent. I have illustrated the calculation of  
2 this range in Schedule DAM-25.

3  
4 **XXVI. FINANCIAL INTEGRITY TEST**

5 Q. YOU STATED THAT YOU TESTED YOUR RECOMMENDED RETURN TO  
6 VERIFY ITS ADEQUACY AND APPROPRIATENESS FOR PSNC ENERGY.  
7 WHAT WAS THE NATURE OF THIS TEST?

8 A. I compared the range of After-Tax Interest Coverage ratios at my  
9 recommended allowed return on common equity to the current After-Tax Interest  
10 Coverage ratios of the comparable LDCs. The After-Tax Interest Coverage is a  
11 straight-forward comparison of funds from operations to the interest payments as a  
12 measure of a company's ability to meet fixed interest obligations. The higher the  
13 coverage ratio, the greater the likelihood that the returns from operations will be  
14 sufficient to meet the fixed interest obligations.

15 Q. WHAT DID YOUR COMPARISON OF AFTER-TAX INTEREST COVERAGE  
16 RATIOS FOR PSNC ENERGY AT YOUR RECOMMENDED ALLOWED  
17 RETURN RANGE SHOW?

18 A. I illustrate this comparison in Schedule DAM-26. The After-Tax Interest  
19 Coverage ratio for the comparable LDCs was much higher than the After-Tax Interest  
20 Coverages ratio of PSNC Energy at even the highest end of my recommended  
21 allowed return range. The After-Tax Interest Coverage for PSNC Energy at 12.0  
22 percent on common equity is only 3.22 times. By comparison the average After-Tax  
23 Interest Coverage for the comparable companies is currently 3.81 times. This

1 difference is significant in coverage ratios. This confirms that even the high end of  
2 my estimated range is very conservative and not excessive. Further, given the current  
3 volatile financial markets, to be prudent, I am recommending going to the top end of  
4 my range, 12.0 percent. Moreover, if anything, these coverages call into question  
5 whether my recommended return will be adequate to attract capital if market  
6 volatility continues or worsens.

7 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

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

**FILED**

**MAR 31 2008**

Clerk's Office  
N.C. Utilities Commission

BEFORE THE  
  
NORTH CAROLINA UTILITIES COMMISSION  
  
PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 495

EXHIBIT  
  
TO ACCOMPANY THE DIRECT TESTIMONY  
  
OF  
  
DONALD A MURRY, Ph. D.

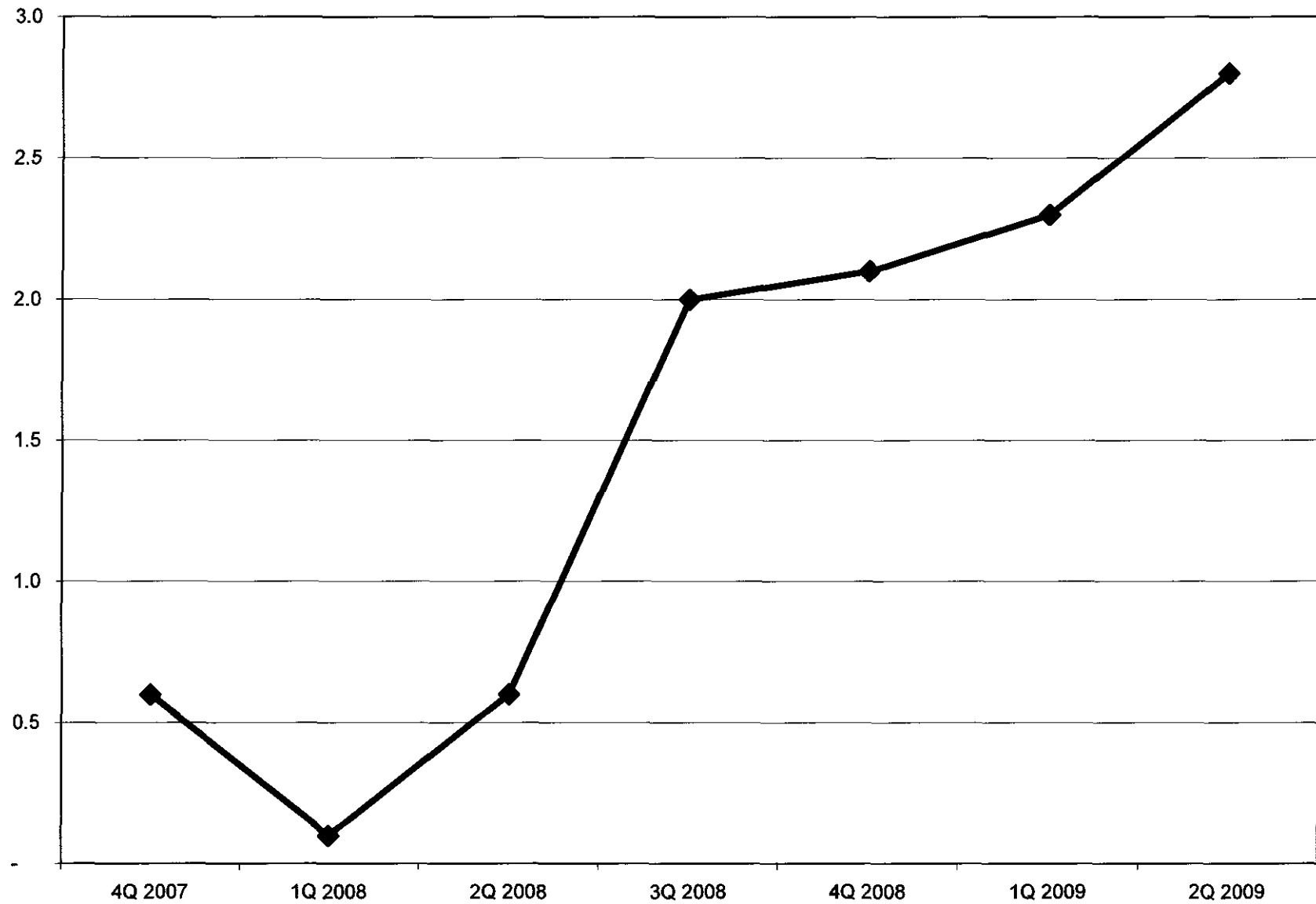
MARCH 31, 2008

Public Service Company of North Carolina

List of Schedules

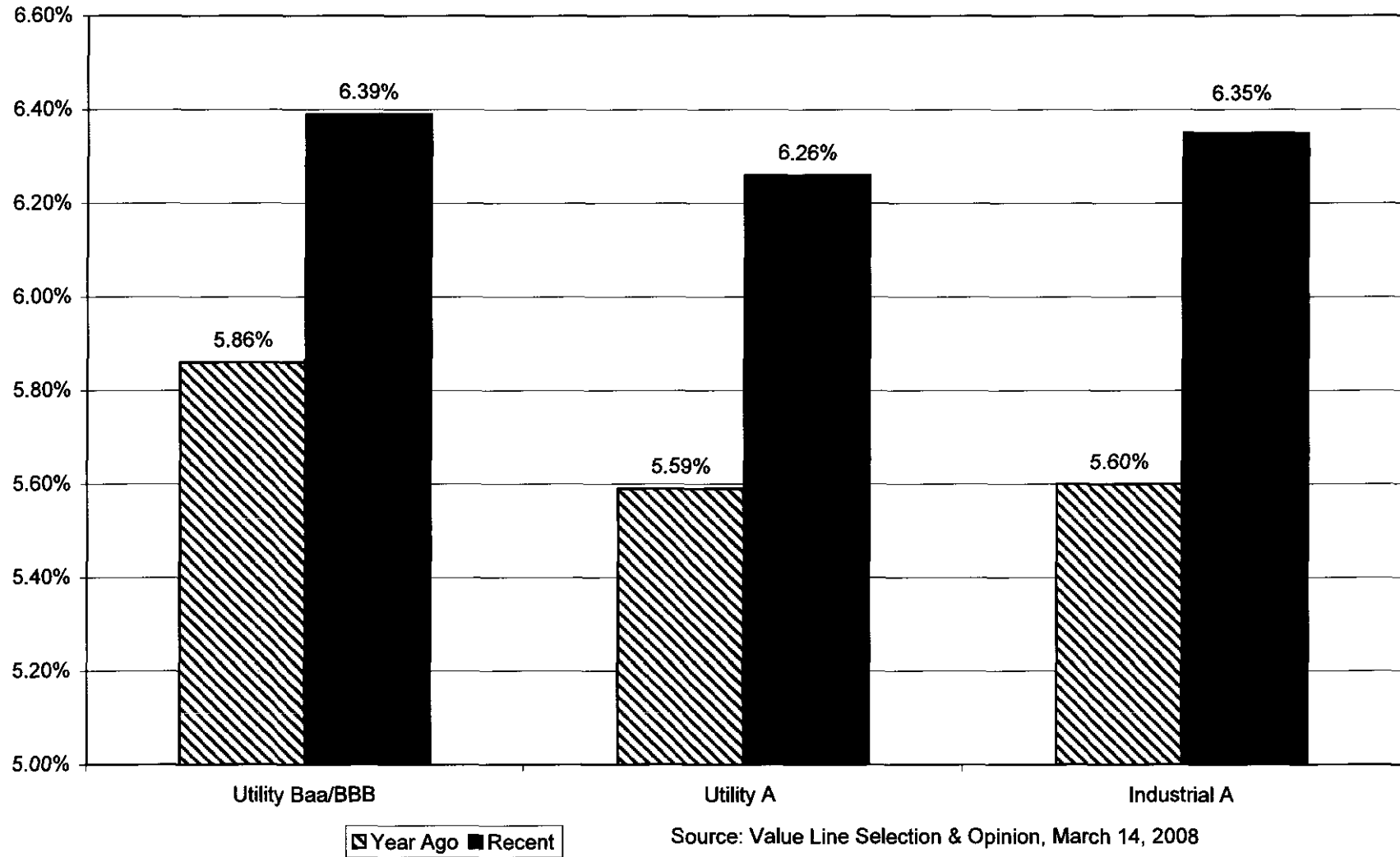
- Schedule DAM-1: Real GDP Consensus Forecast
- Schedule DAM-2: Corporate Bond Yield Comparison
- Schedule DAM-3: Historical Economic Statistics
- Schedule DAM-4: History of Long-Term Bond Interest Rates
- Schedule DAM-5: Bond Interest Rate Forecasts
- Schedule DAM-6: *Value Line* Interest Rates and Forecasts
- Schedule DAM-7: Comparison of T-Bills and Baa Bond Yields
- Schedule DAM-8: Proposed Capital Structure
- Schedule DAM-9: Comparison of Common Equity Ratios
- Schedule DAM-10: Comparison of Financial and Bond Ratings
- Schedule DAM-11: Comparison of *Value Line's* Safety and Timeliness Rank
- Schedule DAM-12: Comparison of Returns on Common Equity
- Schedule DAM-13: Comparison of Dividend Payout Ratios
- Schedule DAM-14: Comparison of Average Annual Price-Earnings Ratio
- Schedule DAM-15: Discounted Cash Flow Growth Rate Summary
- Schedule DAM-16: Dividend Growth Rate DCF Using Current Share Prices
- Schedule DAM-17: Dividend Growth Rate DCF Using 52-Week Share Prices
- Schedule DAM-18: Earnings Growth Rate DCF Using Current Share Prices
- Schedule DAM-19: Earnings Growth Rate DCF Using 52-Week Share Prices
- Schedule DAM-20: *Projected Growth Rate DCF Using Current Share Prices*
- Schedule DAM-21: *Projected Growth Rate DCF Using 52-Week Share Prices*
- Schedule DAM-22: SBI Valuation Edition 2007 Yearbook
- Schedule DAM-23: Size Adjusted Capital Asset Pricing Model
- Schedule DAM-24: Historical Capital Asset Pricing Model
- Schedule DAM-25: Proposed Cost of Capital
- Schedule DAM-26: Comparison of After-Tax Interest Earned Ratios

**PSNC Energy  
Real GDP Consensus Forecast**

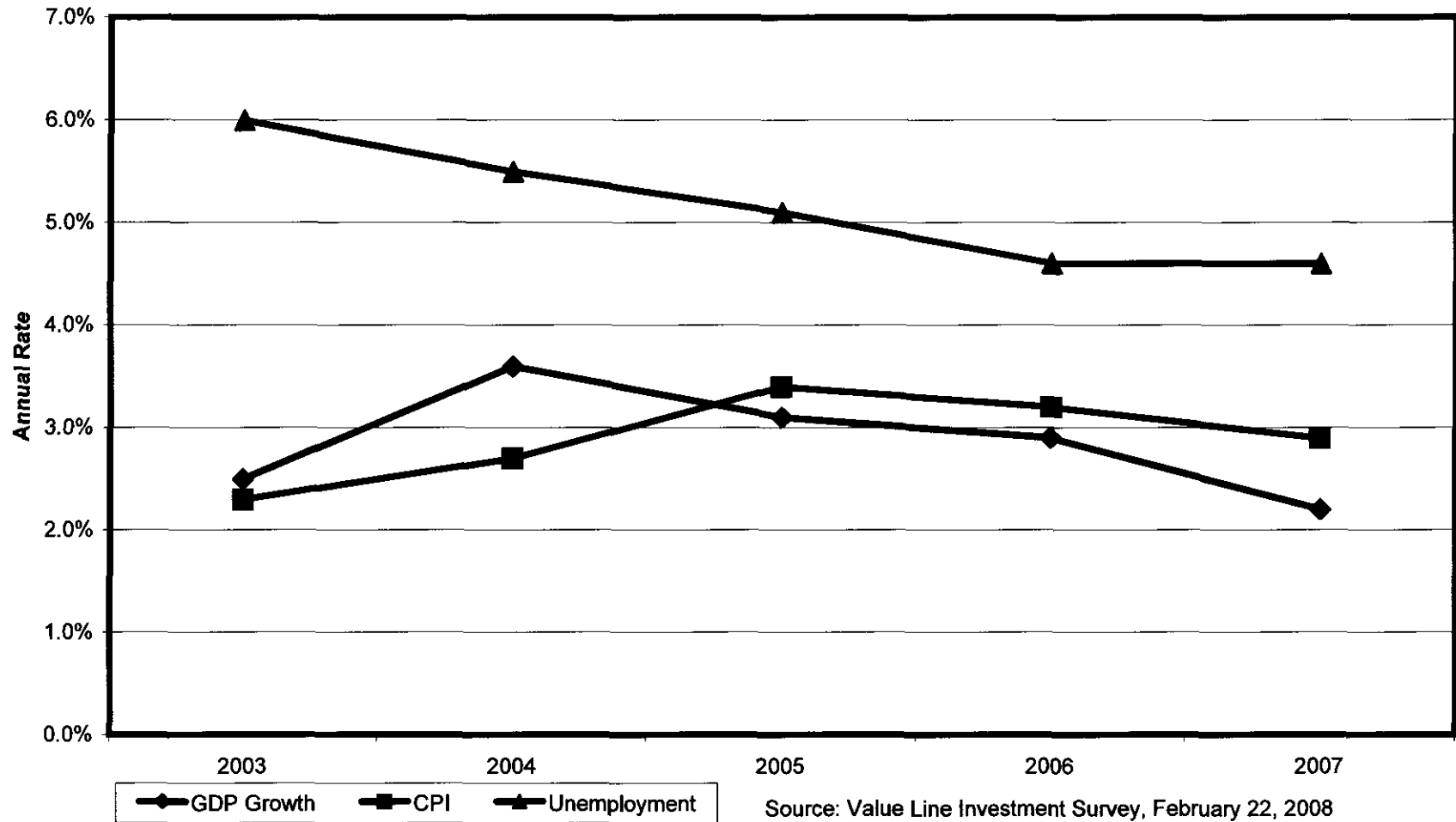


Source: Blue Chip Financial Forecasts, March 1, 2008

# PSNC Energy Corporate Bond Yield Comparison

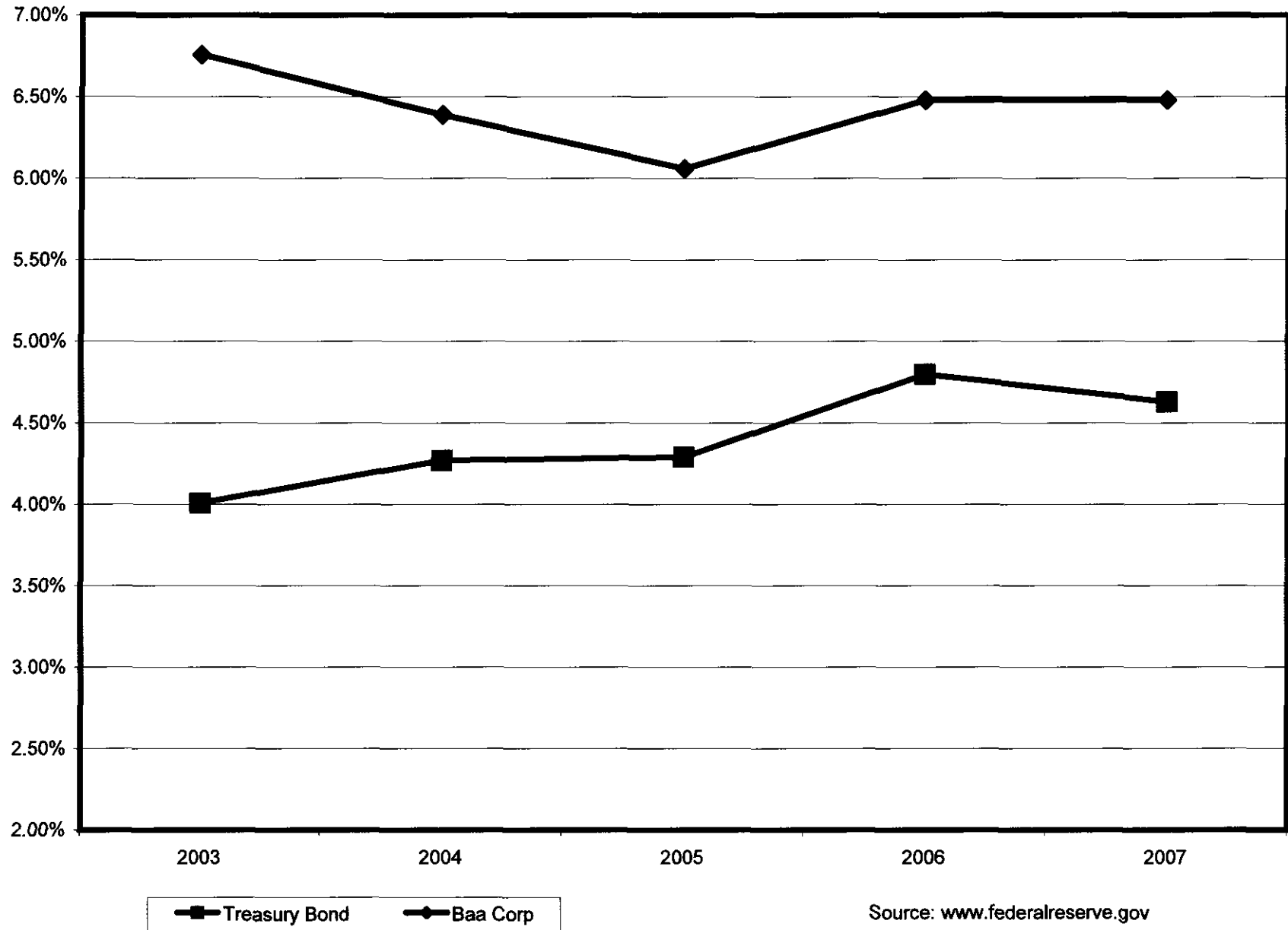


**PSNC Energy  
Historical Economic Statistics  
2003 to 2007**

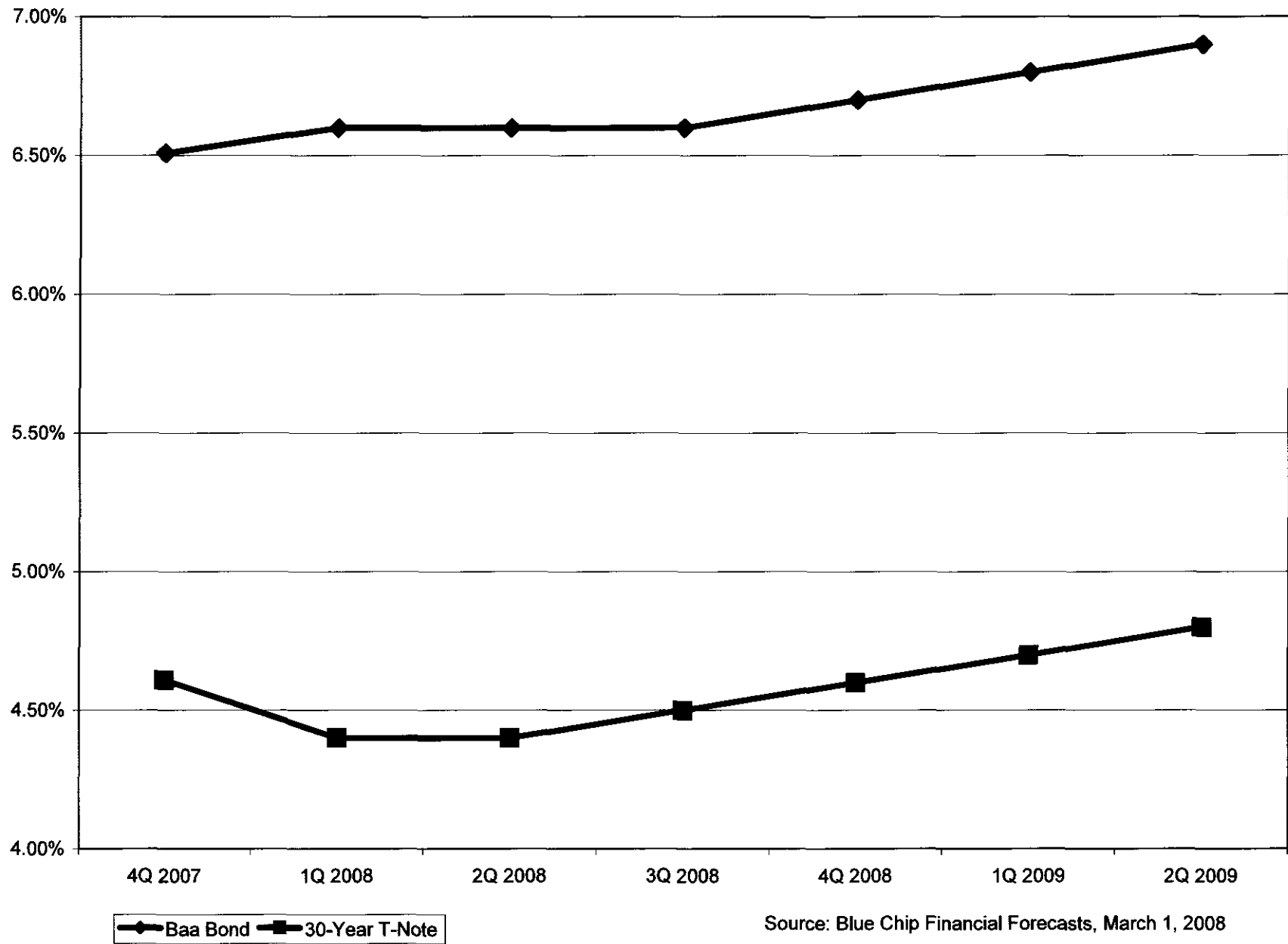




**PSNC Energy  
History of Long-Term Bond Interest Rates**

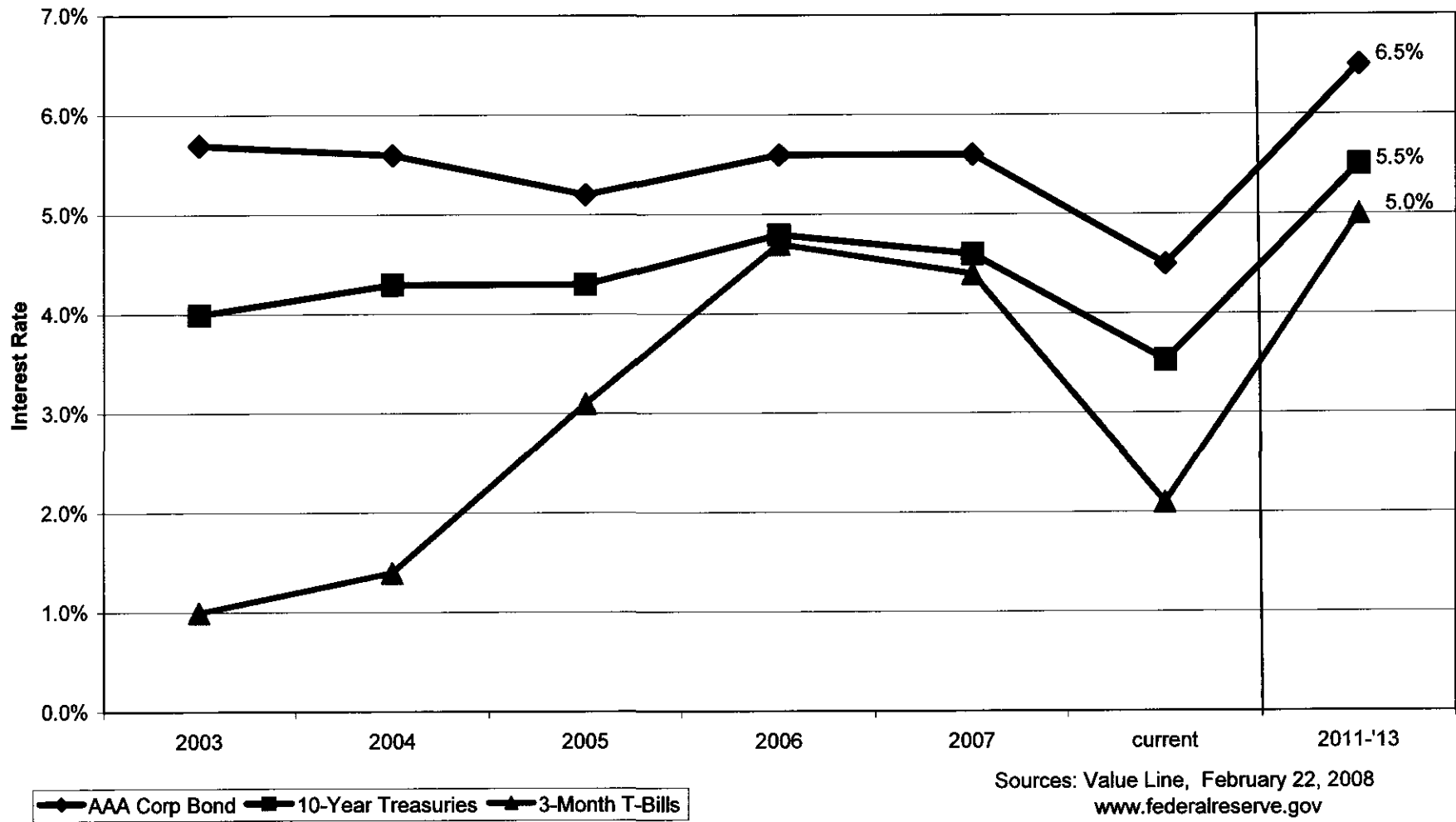


# PSNC Energy Bond Interest Rate Forecasts

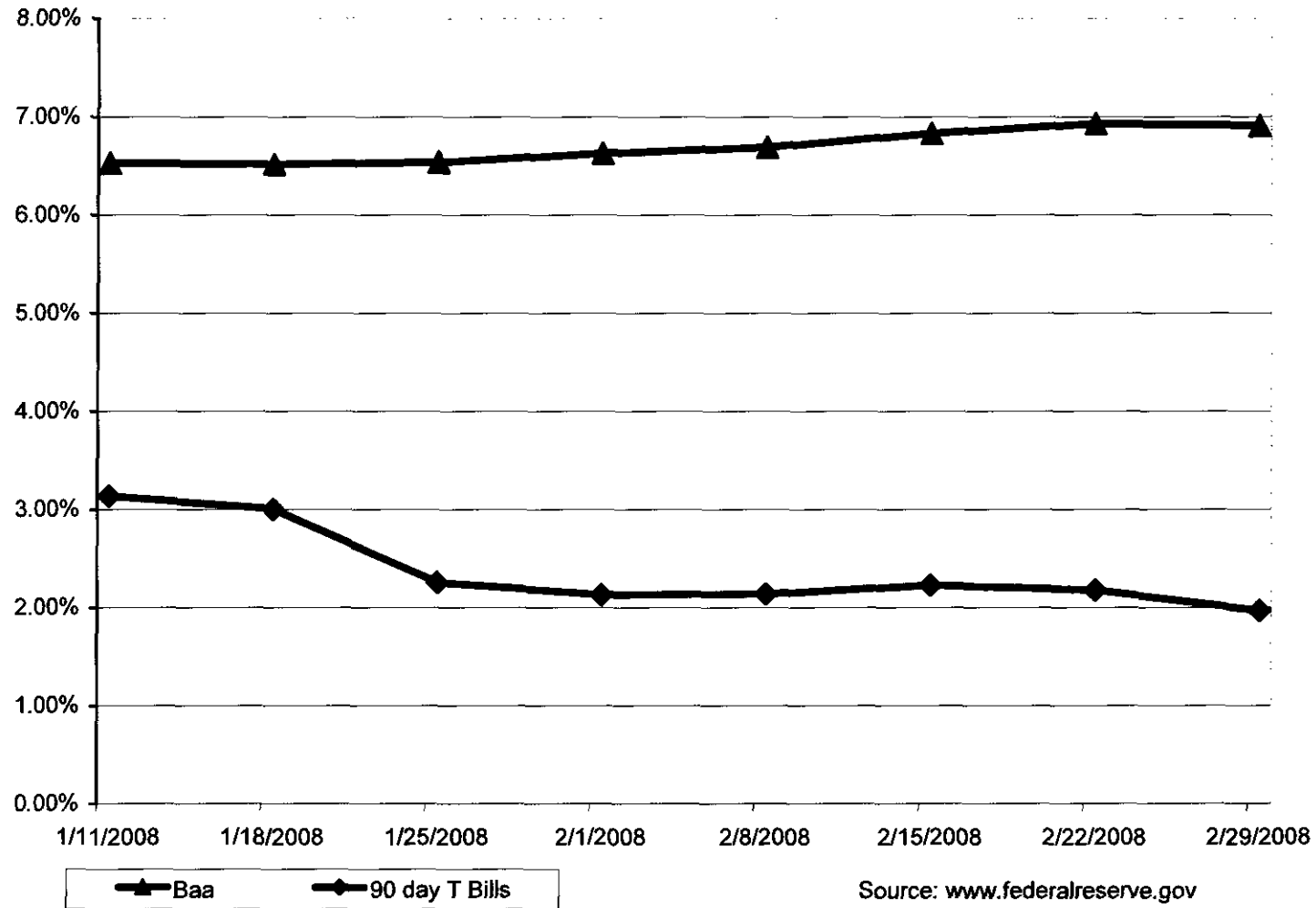


**PSNC Energy  
Value Line Interest Rates and Forecasts  
2003- 2013**

*Forecast*



**PSNC Energy**  
**Comparison of T-Bills and Baa Bond Yield**  
**January 11, 2008 - February 29, 2008**



## PSNC Energy

## Proposed Capital Structure

Pro Forma for the Test Year Ending December 31, 2007

Item	Amount	Share
Long-Term Debt	\$262,800,000	35.89%
Short-Term Debt	\$75,897,470	10.36%
Common Equity	\$393,567,000	53.75%
Totals	\$732,264,470	100.00%

Source: Public Service Company of North Carolina Work Papers

**PSNC Energy**

**Comparable Gas Companies**

**Comparison of Common Equity Ratios**

Company	2004	2005	2006	2007	2008E	Forecast 10-'12
SCANA Corporation	42.6%	46.6%	47.2%	48.5%	47.0%	49.0%
Laclede Group	48.3%	51.8%	50.4%	55.0%	53.0%	51.0%
New Jersey Resources	59.7%	58.0%	65.2%	67.0%	69.5%	72.8%
Northwest Natural Gas	54.0%	53.0%	53.7%	53.0%	53.0%	52.0%
South Jersey Industries	51.0%	55.1%	55.3%	57.0%	57.0%	59.0%
Southwest Gas	35.8%	36.2%	39.4%	42.0%	43.5%	47.0%
WGL Holdings	57.2%	58.6%	61.5%	60.3%	63.4%	65.8%
Comparable Companies' Averages	51.0%	52.1%	54.3%	55.7%	56.6%	57.9%

Source: Value Line Investment Survey

## PSNC Energy

## Comparable Gas Companies

## Comparison of Financial and Bond Ratings

Company	Value Line Financial Strength	S&P Rating
SCANA Corporation	A	A-
Laclede Group	B+	A
New Jersey Resources	A	A-
Northwest Natural Gas	A	AA-
South Jersey Industries	B++	BBB+
Southwest Gas	B	BBB-
WGL Holdings	A	AA-
Comparable Companies' Median	A	A-

Sources: Value Line Investment Survey  
[www.standardandpoors.com](http://www.standardandpoors.com)

## PSNC Energy

## Comparable Gas Companies

## Comparison of Value Line's Safety and Timeliness Rank

	Safety Rank	Timeliness Rank
SCANA Corporation	2	4
Laclede Group	2	3
New Jersey Resources	1	4
Northwest Natural Gas	1	3
South Jersey Industries	2	4
Southwest Gas	3	4
WGL Holdings	1	3
Comparable Companies' Average	1.7	3.5

Source: Value Line Investment Survey



PSNC Energy

Comparable Gas Companies

Comparison of Returns on Common Equity

	2004	2005	2006	2007	2008E	Five Year Average
SCANA Corporation	12.2%	11.8%	10.5%	10.5%	11.0%	11.2%
Laclede Group	10.1%	10.9%	12.5%	11.00%	10.50%	11.0%
New Jersey Resources	15.3%	17.0%	12.6%	13.0%	12.0%	14.0%
Northwest Natural Gas	8.9%	9.9%	10.6%	11.0%	11.5%	10.4%
South Jersey Industries	12.5%	12.4%	16.3%	12.5%	13.0%	13.3%
Southwest Gas	8.3%	6.4%	9.0%	9.5%	10.0%	8.6%
WGL Holdings	11.7%	12.0%	10.2%	11.1%	11.0%	11.2%
Comparable Companies' Averages	11.1%	11.4%	11.9%	11.4%	11.3%	11.4%

Source: Value Line Investment Survey

**PSNC Energy**

**Comparable Gas Companies**

**Comparison of Dividend Payout Ratios**

	2004	2005	2006	2007	2008E	Five Year Average
SCANA Corporation	55%	56%	65%	66%	64%	61.2%
Laclede Group	73%	72%	59%	63%	68%	67.0%
New Jersey Resources	49%	50%	50%	48%	49%	49.2%
Northwest Natural Gas	69%	63%	60%	54%	55%	60.2%
South Jersey Industries	52%	50%	37%	50%	52%	48.2%
Southwest Gas	49%	65%	41%	40%	37%	46.4%
WGL Holdings	65%	62%	70%	65%	63%	65.0%
Comparable Companies' Averages	59.5%	60.3%	52.8%	53.3%	54.0%	56.0%

Source: Value Line Investment Survey

PSNC Energy

Comparable Gas Companies

Comparison of Average Annual Price-Earnings Ratio

Company	2003	2004	2005	2006	2007
SCANA Corporation	13.0	13.6	14.4	15.4	14.7
Laclede Group	13.6	15.7	16.2	13.6	15.0
New Jersey Resources	14.0	15.3	16.8	16.1	15.2
Northwest Natural Gas	15.8	16.7	17.0	16.3	18.2
South Jersey Industries	13.3	14.1	16.6	11.9	18.5
Southwest Gas	19.2	14.3	20.6	15.9	13.9
WGL Holdings	11.1	14.2	14.7	15.5	16.2
Comparable Companies' Averages	14.5	15.1	17.0	14.9	16.2

Source: Value Line Investment Survey

PSNC Energy

Comparable Gas Companies

Discounted Cash Flow Growth Rate Summary

	Value Line						Projections		Yahoo!
	2002 TO 2011 Estimate			Five Year Historical			Value Line		
	EPS	DPS	Book Value	EPS	DPS	Book Value	EPS	DPS	
SCANA Corporation	3.7%	5.0%	4.3%	7.0%	5.0%	2.5%	3.5%	4.0%	4.7%
Laclede Group	5.8%	2.0%	5.4%	6.5%	0.5%	3.5%	4.0%	2.5%	3.5%
New Jersey Resources	5.3%	4.8%	10.3%	8.0%	3.5%	8.5%	4.0%	5.0%	5.4%
Northwest Natural Gas	7.3%	4.8%	3.7%	-3.0%	2.5%	2.5%	7.0%	5.5%	4.9%
South Jersey Industries	9.8%	5.3%	7.2%	3.0%	1.5%	3.5%	NMF	5.5%	6.6%
Southwest Gas	9.5%	1.0%	3.9%	9.5%	3.5%	13.5%	8.0%	1.5%	5.0%
WGL Holdings	2.7%	2.0%	4.0%	6.0%	1.5%	3.0%	2.0%	2.5%	4.0%
Comparable Companies' Averages	6.73%	3.32%	5.76%	5.00%	2.17%	5.75%	5.00%	3.75%	4.90%

Sources:

Value Line Investment Survey

Yahoo! Finance

Note: "NMF" - No Meaningful Figure

PSNC Energy

Comparable Gas Companies

Dividend Growth Rate DCF Using Current Share Prices

	Share Prices		Current	Current Yields		2001-03	2010-12E	Growth	Cost of Capital	
	Low	High	Dividend	Low	High	DPS	DPS	Rate	Low	High
SCANA Corporation	37.78	38.47	1.82	4.73%	4.82%	1.29	2.00	4.96%	9.69%	9.78%
Laclede Group	34.16	34.98	1.49	4.26%	4.36%	1.34	1.60	1.99%	6.25%	6.35%
New Jersey Resources	40.37	41.18	1.60	3.89%	3.96%	1.20	1.84	4.83%	8.72%	8.79%
Northwest Natural Gas	42.43	43.57	1.52	3.49%	3.58%	1.26	1.92	4.79%	8.28%	8.37%
South Jersey Industries	34.22	35.21	1.10	3.12%	3.21%	0.76	1.20	5.26%	8.38%	8.47%
Southwest Gas	25.96	26.71	0.86	3.22%	3.31%	0.82	0.90	1.04%	4.26%	4.35%
WGL Holdings	31.56	32.27	1.40	4.34%	4.44%	1.27	1.52	2.02%	6.35%	6.45%
Comparable Companies' Averages	34.78	35.65	1.33	3.72%	3.81%	1.11	1.50	3.32%	7.04%	7.13%

Sources:

Value Line Investment Survey

Yahoo! FINANCE

PSNC Energy

Comparable Gas Companies

Dividend Growth Rate DCF Using 52-Week Share Prices

	Share Prices		2008	52 Week Yields		2001-03	2010-12E	Growth	Cost of Capital	
	Low	High	Dividend	Low	High	DPS	DPS	Rate	Low	High
SCANA Corporation	32.93	45.49	1.82	4.00%	5.53%	1.29	2.00	4.96%	8.96%	10.49%
Laclede Group	33.33	35.72	1.49	4.17%	4.47%	1.34	1.60	1.99%	6.16%	6.46%
New Jersey Resources	29.62	56.45	1.60	2.83%	5.40%	1.20	1.84	4.83%	7.67%	10.23%
Northwest Natural Gas	40.73	52.85	1.52	2.88%	3.73%	1.26	1.92	4.79%	7.67%	8.52%
South Jersey Industries	31.20	41.27	1.10	2.67%	3.53%	0.76	1.20	5.26%	7.92%	8.78%
Southwest Gas	25.14	39.95	0.86	2.15%	3.42%	0.82	0.90	1.04%	3.19%	4.46%
WGL Holdings	29.79	35.77	1.40	3.91%	4.70%	1.27	1.52	2.02%	5.93%	6.72%
Comparable Companies' Averages	31.64	43.67	1.33	3.10%	4.21%	1.11	1.50	3.32%	6.42%	7.53%

Sources:

Value Line Investment Survey

Yahoo! FINANCE

PSNC Energy

Comparable Gas Companies

Earnings Growth Rate DCF Using Current Share Prices

	Share Prices		Current	Current Yields		2001-03	2010-12E	Growth	Cost of Capital	
	Low	High	Dividend	Low	High	EPS	EPS	Rate	Low	High
SCANA Corporation	37.78	38.47	1.82	4.73%	4.82%	2.34	3.25	3.70%	8.43%	8.52%
Laclede Group	34.16	34.98	1.49	4.26%	4.36%	1.54	2.55	5.79%	10.05%	10.15%
New Jersey Resources	40.37	41.18	1.60	3.89%	3.96%	2.14	3.40	5.28%	9.16%	9.24%
Northwest Natural Gas	42.43	43.57	1.52	3.49%	3.58%	1.75	3.30	7.28%	10.77%	10.86%
South Jersey Industries	34.22	35.21	1.10	3.12%	3.21%	1.25	2.90	9.83%	12.96%	13.05%
Southwest Gas	25.96	26.71	0.86	3.22%	3.31%	1.15	2.60	9.52%	12.74%	12.84%
WGL Holdings	31.56	32.27	1.40	4.34%	4.44%	1.77	2.25	2.68%	7.02%	7.12%
Comparable Companies' Averages	34.78	35.65	1.33	3.72%	3.81%	1.60	2.83	6.73%	10.45%	10.54%

Sources:

Value Line Investment Survey

Yahoo! FINANCE

PSNC Energy

Comparable Gas Companies

Earnings Growth Rate DCF Using 52-Week Share Prices

	Share Prices		2008	52 Week Yields		2001-03	2010-12E	Growth	Cost of Capital	
	Low	High	Dividend	Low	High	EPS	EPS	Rate	Low	High
SCANA Corporation	32.93	45.49	1.82	4.00%	5.53%	2.34	3.25	3.70%	7.70%	9.23%
Laclede Group	33.33	35.72	1.49	4.17%	4.47%	1.54	2.55	5.79%	9.96%	10.26%
New Jersey Resources	29.62	56.45	1.60	2.83%	5.40%	2.14	3.40	5.28%	8.11%	10.68%
Northwest Natural Gas	40.73	52.85	1.52	2.88%	3.73%	1.75	3.30	7.28%	10.16%	11.01%
South Jersey Industries	31.20	41.27	1.10	2.67%	3.53%	1.25	2.90	9.83%	12.50%	13.36%
Southwest Gas	25.14	39.95	0.86	2.15%	3.42%	1.15	2.60	9.52%	11.68%	12.94%
WGL Holdings	29.79	35.77	1.40	3.91%	4.70%	1.77	2.25	2.68%	6.59%	7.38%
Comparable Companies' Averages	31.64	43.67	1.33	3.10%	4.21%	1.60	2.83	6.73%	9.83%	10.94%

Sources:

Value Line Investment Survey

Yahoo! FINANCE



PSNC Energy

Comparable Gas Companies

Projected Growth Rate DCF Using Current Share Prices

	Share Prices		Current Dividend	Current Yields		EPS Estimates		Cost of Capital	
	Low	High		Low	High	Value Line	Yahoo!	Low	High
SCANA Corporation	37.78	38.47	1.82	4.73%	4.82%	3.50%	4.66%	8.23%	9.48%
Laclede Group	34.16	34.98	1.49	4.26%	4.36%	4.00%	3.50%	7.76%	8.36%
New Jersey Resources	40.37	41.18	1.60	3.89%	3.96%	4.00%	5.38%	7.89%	9.34%
Northwest Natural Gas	42.43	43.57	1.52	3.49%	3.58%	7.00%	4.90%	8.39%	10.58%
South Jersey Industries	34.22	35.21	1.10	3.12%	3.21%	NMF	6.63%	9.75%	9.84%
Southwest Gas	25.96	26.71	0.86	3.22%	3.31%	8.00%	5.00%	8.22%	11.31%
WGL Holdings	31.56	32.27	1.40	4.34%	4.44%	2.00%	4.00%	6.34%	8.44%
Comparable Companies' Averages	34.78	35.65	1.33	3.72%	3.81%	5.00%	4.90%	8.06%	9.65%

Sources:

Value Line Investment Survey

Yahoo! FINANCE

Note: "NMF" - No Meaningful Figure

PSNC Energy

Comparable Gas Companies

Projected Growth Rate DCF Using 52-Week Share Prices

	Share Prices		2008	52 Week Yields		EPS Estimates		Cost of Capital	
	Low	High	Dividend	Low	High	Value Line	Yahoo!	Low	High
SCANA Corporation	32.93	45.49	1.82	4.00%	5.53%	3.50%	4.66%	7.50%	10.19%
Laclede Group	33.33	35.72	1.49	4.17%	4.47%	4.00%	3.50%	7.67%	8.47%
New Jersey Resources	29.62	56.45	1.60	2.83%	5.40%	4.00%	5.38%	6.83%	10.78%
Northwest Natural Gas	40.73	52.85	1.52	2.88%	3.73%	7.00%	4.90%	7.78%	10.73%
South Jersey Industries	31.20	41.27	1.10	2.67%	3.53%	NMF	6.63%	9.30%	10.16%
Southwest Gas	25.14	39.95	0.86	2.15%	3.42%	8.00%	5.00%	7.15%	11.42%
WGL Holdings	29.79	35.77	1.40	3.91%	4.70%	2.00%	4.00%	5.91%	8.70%
Comparable Companies' Averages	31.64	43.67	1.33	3.10%	4.21%	5.00%	4.90%	7.44%	10.04%

Sources:

Value Line Investment Survey

Yahoo! FINANCE

Note: "NMF" - No Meaningful Figure

Should the yield on a Treasury bond or a Treasury strip be used to represent the riskless rate? In most cases the yield on a Treasury coupon bond is most appropriate. If the asset being measured spins off cash periodically, the Treasury bond most closely replicates this characteristic. On the other hand, if the asset being measured provides a single payoff at the end of a specified term, the yield on a Treasury Strip would be more appropriate.

### CAPM Modified for Firm Size

One of the important characteristics not necessarily captured by the Capital Asset Pricing Model is what is known as the size effect. This is discussed in detail in Chapter 7. The need for this premium when using the CAPM arises because, even after adjusting for the systematic (beta) risk of small stocks, they outperform large stocks. The betas for small companies tend to be greater than those for large companies; however, these higher betas do not account for all of the risks faced by those who invest in small companies.<sup>2</sup> This premium can be added directly to the results obtained using the CAPM:

$$k_s = r_f + (\beta_s \times ERP) + SP_s$$

where all of the variables are as given in the previous section on the CAPM, and  $SP_s$  is the appropriate size premium based on the firm's equity market capitalization. The market capitalization of company  $s$  will determine the relevant size premium: mid-cap, low-cap, or micro-cap.

Suppose we wish to calculate the cost of equity for a small electric utility company. To better account for both the industry risk and the firm size, we wish to use the modified CAPM approach. The company has a market capitalization of \$135 million and falls within the micro-cap size group. Assume that the beta of the company is 0.53. The key variables for calculating the cost of equity using this size-premium-adjusted CAPM are:

Risk-free rate	= 4.9 percent
Expected equity risk premium	= 7.1 percent
The appropriate size premium	= 3.9 percent

Using the modified CAPM equation, the cost of equity for the electric utility company is:

$$k_s = r_f + (\beta_s \times ERP) + SP_s = 4.9\% + (0.53 \times 7.1\%) + 3.9\% = 12.6\%$$

The beta-adjusted size premium is the most appropriate for use with this model. Please note that the size premia commonly referred to in this publication are the beta-adjusted size premia, unless stated otherwise. The non-beta-adjusted size premia already account for the added return generally attributed to the higher betas of small companies. The non-beta-adjusted size premium makes the assumption that the beta of the company is the same as that of the small stock portfolio. If the non-beta-adjusted

<sup>2</sup> In general, small company betas are expected to be higher than large company betas. This, however, does not hold for all time periods. Chapter 6 discusses in more detail the measurement of beta for small stocks.

**PSNC Energy**

**Comparable Gas Companies**

**Size Adjusted Capital Asset Pricing Model**

	Risk Free Return	Beta	Equity Risk Premium	Adjusted Equity Risk Premium	Size Premium	Cost of Equity
SCANA Corporation	4.49%	0.85	7.10%	6.04%	0.97%	11.50%
Laclede Group	4.49%	0.95	7.10%	6.75%	1.76%	13.00%
New Jersey Resources	4.49%	0.85	7.10%	6.04%	1.76%	12.29%
Northwest Natural Gas	4.49%	0.90	7.10%	6.39%	1.76%	12.64%
South Jersey Industries	4.49%	0.85	7.10%	6.04%	1.76%	12.29%
Southwest Gas	4.49%	0.90	7.10%	6.39%	1.76%	12.64%
WGL Holdings	4.49%	0.85	7.10%	6.04%	1.76%	12.29%
Comparable Companies' Average	4.49%	0.88	7.10%	6.27%	1.76%	12.52%

**Sources :**

Value Line Investment Survey

Morningstar 2007 SBBI Yearbook: Valuation Edition

Federal Reserve Statistical Release

**PSNC Energy**

**Comparable Gas Companies**

**Historical Capital Asset Pricing Model**

	Market Total Returns	Long-Term Corporate Bonds Return	Risk Premium	Beta	Adjusted Risk Premium	Aaa Corporate Bonds Return	Cost of Equity
SCANA Corporation	14.85%	6.20%	8.65%	0.85	7.35%	5.53%	12.88%
Laclede Group	14.85%	6.20%	8.65%	0.95	8.22%	5.53%	13.75%
New Jersey Resources	14.85%	6.20%	8.65%	0.85	7.35%	5.53%	12.88%
Northwest Natural Gas	14.85%	6.20%	8.65%	0.90	7.79%	5.53%	13.32%
South Jersey Industries	14.85%	6.20%	8.65%	0.85	7.35%	5.53%	12.88%
Southwest Gas	14.85%	6.20%	8.65%	0.90	7.79%	5.53%	13.32%
WGL Holdings	14.85%	6.20%	8.65%	0.85	7.35%	5.53%	12.88%
Comparable Companies' Average	14.85%	6.20%	8.65%	0.88	7.64%	5.53%	13.17%

**Sources :**

Value Line Investment Survey

Morningstar 2007 SBBI Yearbook: Valuation Edition

Federal Reserve Statistical Release

## PSNC Energy

## Proposed Cost of Capital

Pro Forma for the Test Year Ending December 31, 2007

Item	Amount	Share	Embedded Cost		Weighted Cost	
			Low	High	Low	High
Long-Term Debt	\$262,800,000	35.89%	7.07%	7.07%	2.54%	2.54%
Short-Term Debt	\$75,897,470	10.36%	3.55%	3.55%	0.37%	0.37%
Common Equity	\$393,567,000	53.75%	11.50%	12.00%	6.18%	6.45%
Totals	\$732,264,470	100.00%			9.09%	9.36%

Source:  
Schedule DAM-8

**PSNC Energy****Comparable Gas Companies****Comparison of After-Tax Times Interest Earned Ratios**

<b>PSNC Energy</b>	<b>@11.50% ROE</b>	<b>3.13</b>
	<b>@12.00% ROE</b>	<b>3.22</b>
<b>Laclede Group</b>		<b>3.20</b>
<b>New Jersey Resources</b>		<b>6.38</b>
<b>Northwest Natural Gas</b>		<b>3.14</b>
<b>South Jersey Industries</b>		<b>3.94</b>
<b>Southwest Gas</b>		<b>2.11</b>
<b>WGL Holdings</b>		<b>4.07</b>
<b>Comparable Companies' Average</b>		<b>3.81</b>

Source : Value Line Investment Survey

**FILED**  
**MAR 31 2008**  
Clerk's Office  
N.C. Utilities Commission

BEFORE THE  
  
NORTH CAROLINA UTILITIES COMMISSION  
  
PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 495

DIRECT TESTIMONY  
  
OF  
  
JULIUS A. WRIGHT, Ph. D.

MARCH 31, 2008



## **I. INTRODUCTION**

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

2 A. My name is Julius A. Wright, President, J.A. Wright & Associates, Inc., 3307  
3 Loridan Way, Atlanta, Georgia 30339.

4 Q. FOR WHOM ARE YOU PRESENTING TESTIMONY IN THIS DOCKET?

5 A. I am presenting testimony on behalf of Public Service Company of North Carolina,  
6 Inc. ("PSNC Energy" or the "Company").

7 Q. DR. WRIGHT, PLEASE SUMMARIZE YOUR EDUCATION AND  
8 PROFESSIONAL EXPERIENCE.

9 A. I received a Bachelor of Science degree in Chemistry from Valdosta State College in  
10 1974. I later earned an MBA in Finance from Georgia State University in Atlanta,  
11 Georgia, and a Masters and Ph.D. in Economics from North Carolina State  
12 University, where I focused on regulatory and environmental economics. I have  
13 completed the Michigan State Regulatory Course, several National Association of  
14 Regulatory Utility Commissioners ("NARUC") courses on regulation, and various  
15 management and investment seminars.

16 I am the President of J. A. Wright & Associates, Inc. Prior to starting my  
17 practice, I was a Client Partner for AT&T Solutions, Utilities and Energy Practice.  
18 Before that affiliation, I was a Utility Consultant for three years with EDS. Prior to  
19 that I was a Commissioner on the North Carolina Utilities Commission (the  
20 "Commission"). I also served three terms in the North Carolina State Senate. During  
21 the time that I was a Senator, I was also a Senior Process Engineer with Corning

1 Glass in its Fiber Optic Division. Prior to my work at Corning, I worked for four  
2 years in the chemical industry, first as a Process Chemist and later as a Senior Project  
3 Engineer.

4 In the course of my consulting work, I have addressed various regulatory  
5 issues, including: integrated resource planning; regulatory strategies for dealing with  
6 the transition to competitive electric and telecommunications markets; issues related  
7 to potentially strandable costs; prudence reviews; avoided cost determinations; rate  
8 forecasting; gas integrated resource planning; and, electric utility telecommunications  
9 strategies. My detailed resume is provided as an appendix to this testimony.

10 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

11 A. The purpose of my testimony is to address two specific issues. The first is the policy  
12 perspective related to the decoupling of rates or revenues in conjunction with the  
13 Company's proposed semi-annual rate adjustment mechanism, also referred to as a  
14 Customer Usage Tracker ("CUT"). The second issue I address is the Company's  
15 proposed efforts with respect to customer conservation initiatives and the proposed  
16 cost recovery mechanism for three programs.

17  
18 **II. REVENUE DECOUPLING ALONG WITH A SEMI-ANNUAL**  
19 **RATE ADJUSTMENT MECHANISM**

20 Q. PLEASE DEFINE REVENUE DECOUPLING.

21 A. Revenue decoupling is a regulatory rate-setting process that separates the recovery of  
22 costs (such as fixed costs, including margins) from the sales volume the utility

1 achieves. Under traditional regulation, if customers conserve energy the utility's  
2 fixed cost recovery will decline, assuming other costs are relatively constant.  
3 Revenue decoupling severs this traditional tie between sales volume and fixed cost  
4 recovery.

5 Q. WILL YOU PLEASE PROVIDE A BRIEF HISTORICAL PERSPECTIVE OF  
6 REVENUE DECOUPLING?

7 A. Yes. Revenue decoupling is a mechanism that has been used in regulatory settings  
8 for several decades. For example, decoupling of revenues from sales began in the  
9 natural gas industry as early as 1978 in California. During or shortly after that time  
10 several other states and utilities adopted similar decoupling mechanisms.

11 As the national focus on energy conservation has heightened, it appears the  
12 revenue decoupling idea has gained more widespread appeal. In July 2003 the  
13 NARUC adopted a resolution supporting rate setting methodologies like revenue or  
14 margin decoupling. There has also been support for this idea from the Natural  
15 Resource Defense Council and the American Gas Association. As of July 2007,  
16 some ten states had adopted decoupling tariffs for natural gas utilities and nine more  
17 were considering their adoption.

18 Q. WHY HAS THERE BEEN AN INCREASED USE OF THE REVENUE  
19 DECOUPLING REGULATORY MODEL IN THE NATURAL GAS INDUSTRY?

20 A. There are basically two related reasons. First, a high percentage of a natural gas  
21 distribution company's non-commodity based costs are fixed and it is the investment  
22 portion of these fixed costs on which the utility earns a return. From an economic

1 perspective, the recovery of these fixed costs would generally best be recovered via a  
2 per-customer service charge. However, in order to totally recover these costs in this  
3 manner, the per-customer basic service charge would be much higher than it is today  
4 and such a change would not be expected to encourage conservation. Therefore,  
5 ratemaking models traditionally used by states regulating natural gas distribution  
6 utilities have dictated that some portion of these fixed costs are recovered in  
7 volumetric rates. These volumetric-based revenues vary as natural gas usage varies.  
8 To the extent that sales volumes are constant, this method of fixed cost recovery is  
9 reasonable as it provides the utility the opportunity to earn its allowed return in the  
10 near term. Note that over time, for a gas utility whose average yearly growth in rate  
11 base is exceeding its annual depreciation rate, a revenue decoupling mechanism does  
12 not alleviate the need for future rate adjustments to recover this growing investment  
13 in capital.

14 However, over the years there has been a steady decline in the volume of  
15 natural gas usage per customer nationwide, based in large part on more efficient  
16 appliances, better insulated homes and offices, and volatile natural gas prices (which  
17 have caused customers to conserve). The result of this declining per-customer gas  
18 usage is the failure to recover the fixed costs (including margins) that were supposed  
19 to be recovered in the volumetric rates. A remedy to this systematic cost under-  
20 recovery is the adoption of a properly designed revenue or margin decoupling type  
21 tariff. Such a tariff would help to provide a natural gas utility a reasonable  
22 opportunity to recover its fixed costs and earn its allowed return.

1           The second reason to adopt revenue decoupling for a natural gas distribution  
2           utility is it more effectively supports the State's and utilities' efforts to promote  
3           energy conservation by removing the recovery of revenues from being dependent on  
4           sales volumes. Decoupling removes the disincentive which exists in the current  
5           regulatory framework for the utility to encourage conservation. If revenues are  
6           decoupled and the costs for utility-sponsored conservation programs recovered, the  
7           utility can promote and encourage conservation without doing so to its own financial  
8           detriment. Consequently, decoupling will create a regulatory atmosphere that more  
9           closely aligns the interest of conservation-minded customers with a utility's financial  
10          interest.

11   Q.   HAS PSNC ENERGY EXPERIENCED A DECLINE IN USAGE PER  
12          CUSTOMER?

13   A.   Yes, approximately 2% per year over the last five years as discussed in Mr. Harris's  
14          testimony.

15   Q.   IS THIS DECLINE IN PER-CUSTOMER USAGE EXPECTED TO CONTINUE?

16   A.   Yes. I think the declining use per customer that PSNC Energy has experienced will  
17          continue. I am informed by the Company that the growth that PSNC Energy has  
18          experienced has largely been in the residential market, and this growth has been  
19          mostly new homes that are better insulated than most of the homes currently served  
20          by the Company. Therefore, as new homes are built and older homes replaced or  
21          remodeled, the overall level of insulation in homes will continue to improve. Also,  
22          the U.S. Department of Energy ("DOE") has increased natural gas residential furnace

1 and boiler efficiency standards. In addition, natural gas commodity prices are higher  
2 than we have seen in the past and are expected to remain so, which usually results in  
3 customers conserving more. Indicators support the conclusion that the declining use  
4 trend will continue.

5 Q. WHAT IS THE PRACTICAL EFFECT OF THIS TREND ON PSNC ENERGY  
6 UNDER THE CURRENT REGULATORY MODEL?

7 A. The practical effect is this -- when PSNC Energy has a rate case under the current  
8 regulatory model, from the first day that new rates go into effect, given the declining  
9 use per customer trend, the new rates cannot and will not recover the revenue  
10 necessary for the Company to recover its fixed costs nor have an opportunity to make  
11 its allowed return.

12 Q. IF A DECOUPLING MECHANISM IS ADOPTED, WHAT WOULD BE THE  
13 EFFECT ON THE COMPANY'S REVENUE IF USAGE PER CUSTOMER  
14 INCREASED?

15 A. A properly designed decoupling mechanism adjusts revenues to correspond to the  
16 volumes determined in the rate case; therefore, there is no opportunity for the  
17 Company to over-recover revenue if usage per customer increases. The adoption of a  
18 properly designed revenue decoupling tariff simply helps to ensure that the utility  
19 would have a reasonable opportunity to earn its allowed return and recover its fixed  
20 costs.

21 Q. DOES THIS PROPOSED CUSTOMER USAGE TRACKING MECHANISM  
22 REMOVE THE COMPANY'S INCENTIVE TO OPERATE EFFICIENTLY?

1 A. No. Since the tracker does not affect the level of expenses, the Company must  
2 continue to operate efficiently in order to maintain its level of profitability. For  
3 example, even though customer margins are levelized, should the Company's  
4 expenses grow disproportionately, its overall level of profits and return would  
5 decline. Consequently, PSNC Energy would continue to have ample incentive to  
6 control expenses and operate as efficiently as possible.

7 Q. HOW HAS THE ISSUE OF RATE DECOUPLING OR A CUSTOMER USAGE  
8 TRACKING MECHANISM BEEN ADDRESSED IN NORTH CAROLINA?

9 A. A revenue decoupling mechanism, referred to as a Customer Utilization Tracker, was  
10 approved for Piedmont Natural Gas Company ("Piedmont") by Commission order in  
11 Docket Nos. G-9, Sub 499; G-21, Sub 461; and G-44, Sub 15, on September 28,  
12 2005. In approving the mechanism, the Commission agreed that the traditional  
13 recovery of much of Piedmont's fixed costs and margins in a volumetric based tariff  
14 "does appear to create a conflict between the interests of the Company and its  
15 customers when it comes to conservation." Subsequently, the North Carolina General  
16 Assembly adopted House Bill 1086 which amended the North Carolina General  
17 Statutes Section 62-133.7 to specifically give the Commission the authority to adopt a  
18 customer usage tracking mechanism.

19 Q. WHAT ARE THE EXPECTED BENEFITS TO NORTH CAROLINIANS SHOULD  
20 THE COMMISSION ADOPT THE PROPOSED CUSTOMER USAGE TRACKING  
21 MECHANISM?

1 A. First, this regulatory mechanism will more effectively support the Company's efforts  
2 to promote efficiency and conservation initiatives, which is a strongly supported  
3 public policy goal of this Commission, the state, and the nation. Second, this  
4 mechanism, to the extent conservation measures are adopted, not only helps promote  
5 reduced gas consumption but it also allows customers to continue to realize savings in  
6 their total gas bill associated with lower gas consumption. Third, it eliminates the  
7 need for the weather normalization adjustment. Fourth, it helps the Company  
8 maintain its financial health, which in turn will help the Company more readily  
9 upgrade and expand its system, which will benefit customers, the Company, and the  
10 state. And finally, it may help extend the time between rate cases, which are time and  
11 resource intensive for the Company and the Commission. For the reasons I have  
12 discussed, it is my opinion that the Company's proposed CUT is in the public interest.

13

14 **III. PSNC ENERGY CONSERVATION INITIATIVES**

15 Q. PLEASE DESCRIBE THE COMPANY'S PROPOSED CONSERVATION  
16 INITIATIVES.

17 A. The Company is proposing four initiatives regarding conservation. The first initiative  
18 is a communications program that will educate its customers and encourage  
19 conservation. The second initiative is an in-home energy audit program, which would  
20 provide for weatherization and conservation measures to be installed at the time of  
21 the visit. The third initiative is an energy efficient equipment rebate program. The



1 fourth initiative is discount rates for high-efficiency residential homes and  
2 commercial buildings that meet certain energy efficiency standards.

3 Q. HOW DID THE COMPANY CHOOSE THESE INITIATIVES?

4 A. In October of 2007 PSNC Energy formed a team consisting of employees from  
5 different areas within both PSNC Energy and SCANA. This team researched and  
6 discussed numerous conservation and efficiency initiatives on several occasions. In  
7 developing the most promising initiatives, team members were assigned to research  
8 and recommend details for the different initiatives. The selected initiatives best met  
9 three primary objectives the Company feels are important in the identification of  
10 appropriate conservation and efficiency initiatives. These three objectives are:

- 11 • the initiative should produce actual and identifiable conservation benefits and  
12 have lasting impact;
- 13 • the initiative should be beneficial and valuable to PSNC Energy's customers;  
14 and
- 15 • the initiative should be easy to understand and communicate to customers.

16 The results of this process identified the conservation initiatives being recommended  
17 by the Company in this proceeding.

18 Q. PLEASE DISCUSS THE COMMUNICATIONS PROGRAM THAT PSNC  
19 ENERGY IS PROPOSING.

20 A. As part of the Company's promotion of the efficient use of natural gas, from time to  
21 time it has communicated various energy efficiency and conservation messages to  
22 their customers. The Company is proposing to sustain and broaden this type of

1       messaging using several different means of discussing conservation with its  
2       customers. This communications effort could include such things as radio and  
3       newspaper advertisements, tri-fold bill inserts, and employee education. These are  
4       the more traditional methods for educating customers about energy conservation. A  
5       second, unique piece of this communications effort is targeted at schools. Customer  
6       surveys indicated that customers get much of their information about conservation  
7       and the environment from their children. With this in mind, the Company is  
8       proposing an "Energy Conservation School Initiative." This is a school classroom  
9       program developed and delivered on behalf of the Company by a third party. The  
10      program's aim is to educate students on energy efficiency and conservation. The  
11      message is shared via a live theater show, and energy efficiency and conservation  
12      materials are provided to teachers and children. The Company's current proposal is  
13      to cover approximately 50 schools (15,000 – 18,000 students) annually across PSNC  
14      Energy's service territory.

15    Q.    PLEASE DISCUSS THE IN-HOME ENERGY AUDIT AND WEATHERIZATION  
16           PROGRAM THAT PSNC ENERGY IS PROPOSING.

17    A.    The Company is proposing to have dedicated employees available to conduct in-  
18           home energy audits. These employees will be appropriately trained energy specialists  
19           whose mission will be to educate customers and help them to conserve and save  
20           energy. Audits would be available to customers for a modest fee. Additionally, the  
21           energy specialists conducting in-home audits would maintain a supply of  
22           weatherization materials and conservation items in their vehicles. Depending on the

1 results of the audit, if any of the measures are deemed helpful, at the customer's  
2 request, the specialist would install some of the energy saving measures at that time.  
3 The customer would pay only for the cost of the materials and items and the audit fee  
4 would be applied towards the cost. Some of the materials and conservation items that  
5 the Company has considered including are caulking, weather-stripping,  
6 programmable thermostats, disappearing stairway covers, low-flow shower heads and  
7 faucet aerators, and duct tape and mastic for sealing ducts.

8 Q. PLEASE DISCUSS THE ENERGY-EFFICIENT EQUIPMENT REBATE  
9 PROGRAM.

10 A. The Company proposes to offer rebates to residential and commercial customers who  
11 increase the efficiency of their furnaces and water heating equipment beyond the  
12 DOE-mandated minimums. This program would be offered to customers replacing  
13 existing gas equipment and the rebate would help offset the higher cost of the more  
14 efficient equipment. The Gas Appliance Manufacturers Association lists the annual  
15 fuel utilization efficiency ("AFUE") for furnaces and the energy factor for water  
16 heaters. Upon installation of a qualifying piece of equipment, the customer would  
17 notify the Company with supporting documentation and the rebate would be paid.  
18 Tankless water heaters, commercial water heaters with a high thermal efficiency, and  
19 furnaces with an AFUE of greater than 90% are some of the appliances that would  
20 qualify for the rebate.

21 Q. PLEASE DISCUSS THE HIGH-EFFICIENCY DISCOUNT RATES BEING  
22 PROPOSED BY THE COMPANY.

1 A. The Company proposes to offer discount rates for residential homes and commercial  
2 buildings that meet certain energy-efficiency standards. As conceived, qualifying  
3 residences would have to meet the Energy Star standards established by the DOE and  
4 the U.S. Environmental Protection Agency. Qualifying commercial structures would  
5 have to receive the Leadership in Energy and Environmental Design ("LEED")  
6 certification of the U.S. Green Building Council.

7 Q. DO THESE INITIATIVES MEET THE PRIMARY OBJECTIVES THE COMPANY  
8 DEEMED IMPORTANT IN DETERMINING THEIR APPROPRIATENESS?

9 A. Yes. It is my opinion, as well as the opinion of representatives of the Company, that  
10 these initiatives meet the Company's objectives. In reducing energy consumption or  
11 by increasing energy efficiency, all four initiatives should produce identifiable  
12 conservation benefits while providing value to PSNC Energy's customers. In  
13 addition, all four initiatives are easy to understand. Finally, it is believed that all four  
14 initiatives will produce lasting results.

15 For example, the communications program will be directed towards all  
16 residential and commercial customers, and the information will be tailored to enhance  
17 its impact. In so doing, the conservation message will heighten customers' awareness  
18 of the need for energy conservation and also, over time, reshape customers' energy  
19 usage habits, thereby producing lasting benefits. The in-home energy audit program  
20 will have a trained employee visiting customers' homes, sharing conservation  
21 information in a face-to-face setting, and installing long-lasting energy-saving  
22 measures on the spot. The rebate program and high-efficiency discount rates are easy

1 to understand and communicate, and both help ensure that long-lasting energy  
2 savings occur by their very nature.

3 Q. WHAT IS THE ANTICIPATED COST OF THE THREE PROGRAMS?

4 A. The Company estimates the programs will cost between \$900,000 and \$1,300,000 per  
5 year. The communications program is estimated to cost between \$100,000 and  
6 \$300,000, the in-home energy audit program is estimated to cost between \$400,000  
7 and \$700,000, and the rebate program is estimated to cost between \$300,000 and  
8 \$600,000 per year.

9 Q. HOW DOES THE COMPANY PROPOSE TO FUND THESE PROGRAMS?

10 A. The Company proposes that the programs be paid for by customers, using the true-up  
11 mechanism detailed in Ms. Paton's testimony. In this manner, customers are  
12 responsible for paying only for costs that are actually incurred. After approval of the  
13 programs is obtained, any funds used for these programs would be recorded in a  
14 separate account up to a limit of \$1.3 million per year.

15 Q. IS THE COMPANY ASKING THE COMMISSION TO APPROVE THESE  
16 PROGRAMS AND THEIR RELATED COSTS IN THIS PROCEEDING?

17 A. No. As I have testified, under the current regulatory framework, there is a financial  
18 disincentive for PSNC Energy to promote conservation. However, if the Commission  
19 approves the Company's use of the CUT and also approves the mechanism for  
20 recovering the cost of the conservation programs, PSNC Energy will, within 60 days  
21 after such an order is issued, file with this Commission for approval of the three  
22 programs I have discussed. Upon receiving Commission approval of the programs,

1 PSNC Energy will implement the programs and aggressively promote conservation  
2 and energy efficiency.

3 Q. HOW WOULD THE COMMISSION BE APPRISED OF THE VARIOUS  
4 CONSERVATION PROGRAMS AND THEIR RESULTS?

5 A. The Company certainly will comply with any reporting requirements the Commission  
6 deems necessary. However, the Company proposes to provide the Commission an  
7 annual update regarding customer participation and other relevant information about  
8 each program. As necessary, the Company will file for modifications to these  
9 programs or for approval of any new programs.

10 Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

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

## J. A. WRIGHT, PhD

Julius A. "Chip" Wright is the President of J. A. Wright and Associates, 3037 Loridan Way, Atlanta, GA, 30339; 770-956-1225; [jawright@mindspring.com](mailto:jawright@mindspring.com).

### **Experience Overview**

Prior to starting his firm, Dr. Wright was a Client Partner for AT&T Solutions Utilities and Energy Practice and before that a Principal in EDS' Management Consulting Services. Prior to this Dr. Wright served an eight-year term as a Utility Commissioner for the state of North Carolina. Prior to that, he served three terms in the North Carolina State Senate while he was a senior project engineer for Corning Glass Works on their optical wave guide project in Wilmington, North Carolina. While serving on the North Carolina Utility Commission, he served four years on the National Association of Regulatory Utility Commissioners (NARUC) Electricity Committee. He has served in various other advisory capacities, including the Keystone Committee on Externalities; the North Carolina Radiation Protection Committee, and on an Oversight Committee for a joint North Carolina/New York/ Department of Energy (DOE) project.

### **Electric Competition Natural Gas, and Regulatory Strategy**

- *"Energy Deregulation,"* March 2001, report of the California State Auditor on the causes of the problems related to high electric prices and blackouts (from May, 2000 through June 2001, and ongoing) in California's restructured electric marketplace. Dr. Wright was one of three consultants who essentially researched and prepared the State Auditor's report.
- Principal author with Dr. Al Danielsen of *"Reliability of Electric Supply In Georgia,"* published by The Bonbright Utilities Center, University of Georgia, June, 2001.
- Presented testimony before the North Carolina Public Utilities Commission on behalf of SCANA Corporation regarding issues related to market power in its merger with Public Service Company of North Carolina, Docket No. G-5, Sub 400; G-3, Sub 0.
- Was the principal author of a report and investigation titled *"An Analysis of Commonwealth Edison's Planning Process For Achieving Reliability of Supply,"* which was an investigation of the Company's planning process to meet its statutory obligation for supplying electricity as Illinois transitions to a competitive retail electric market, Illinois Commerce Commission Docket No. 98-0514.
- Co-authored a national study that used computer modeling techniques to quantify the impact of electric competition on the aggregate economy in each of the 48 continental United States.

- Presented testimony to Louisiana Legislative Committee on behalf of Entergy Corporation regarding the various regulatory and technical issues that need to be addressed in the transition to competition.
- Was a panelist on a Southern Gas Association national televised forum on performance based regulation for the natural gas industry.
- Was the lead policy witness for South Carolina Electric and Gas on obtaining regulatory approval to transfer depreciation reserve from a nuclear plant to T&D depreciation reserve. This is a critical issue in preparing for competition and limiting stranded investment.
- Public Service Company's power and resource acquisitions over a five year period. Developed an overview of Niagara Mohawk Gas' integrated resource planning efforts. This engagement was under a contract from Oak Ridge National Laboratories.

### Presentations and Publications

*"Energy Deregulation,"* March 2001, report of the California State Auditor on the causes of the problems related to high electric prices and blackouts (from May, 2000 through June 2001, and ongoing) in California's restructured electric marketplace. Dr. Wright was one of three consultants who essentially researched and prepared the State Auditor's report.

*"Low Cost States and Electric Restructuring - The Issue is the Price!"* presented to the 1999 Miller Forum on Government, Business and the Economy, University of Southern California, April 19, 1999.

*An Analysis of Commonwealth Edison's Planning Process For Achieving Reliability of Supply,* Illinois Commerce Commission Docket No. 98-0514.

*The Impact of Competition on the Price of Electricity,* author, published by L. A. Wright and Associates, November, 1998.

*"Retail Competition in the Electric Industry: The Impact on Prices,"* presented at the 18<sup>th</sup> Annual Bonbright Center Energy Conference, Atlanta, Georgia, Sept. 10, 1998.

*Potential Economic Impacts of Restructuring the Electric Utility Industry,* co-author, published by the Small Business Survival Committee, Washington, DC, November, 1997.

*"How Deregulation Will Affect Power Quality and Energy Management,"* presented at the Power Quality and Energy Management Conference co-sponsored by Entergy and EPRI, New Orleans, LA, Nov. 14, 1997.

*"Deregulation of the Electric Industry,"* *Proceedings: National Business Energy Forum,* June 26, 1997, New Orleans, LA.

*"Restructuring The Electric Utility Industry: Theory vs. Reality,"* presented at the American Bar Association Restructuring Conference, Raleigh, NC, Dec. 5, 1996.



"Alternative Rate Making for the Natural Gas Industry: State Issues," presented at the Tenth Annual NARUC Biennial Regulatory Information Conference, Columbus, Ohio, Sept. 12, 1996.

"Stranded Assets Recovery Issues," presented at the Western Electric Power Institute: Financial Forum, Tucson, Arizona, March 8, 1996.

"Performance Based Regulation for The Natural Gas Industry," panelist on Southern Gas Association's Televised Regulatory Forum, Dallas, Texas, Jan. 18, 1996.

"Industry Structure Should Meet Stakeholder Objectives," *Electric Light and Power*, Jan., 1996.

"Quantifying the Value of Stranded Investment: A Dynamic Modeling Approach," *Proceedings: Implementing Transmission Access and Power Transactions Conference*, Denver, Colorado, Dec. 14, 1995.

Comments to FERC in the matter of Notice of Proposed Rulemaking on Open Access, Docket No. 95-9-000, 1995.

"Comparing New York State Electric and Gas Corporation's Non-Utility Generator Payments to Current Avoided Cost Rates," report submitted in support of affidavit filed before FERC in Docket No. EL 95-28-000.

"A Solution To The Transmission Pricing and Stranded Investment Problems" *Public Utilities Fortnightly*, January 1995.

"Gas Integrated Resource Planning: The Niagara Mohawk Experience," for Martin Marietta Energy Systems, Inc., under contract to the United States Department of Energy, ORNL/SUB/93-03369.

"Future Regulation In the Water Industry - Can We Solve the Problems Before They Happen?" *Water*, Vol. 29, No. 2, pp. 14-17, Summer 1988.

### Testimony

- Provided testimony for Georgia Power in its 2007 Integrated Resource Plan reviewing the plan filed by the Company and discussing how its demand-side proposals were reasonable, (TRC, RIM, PTC), Docket number 24505-U, May, 2007.
- Presented two testimonies before the South Carolina Public Service Commission on behalf of South Carolina Electric and Gas, Duke Energy and Progress Energy Carolinas in the investigation of adoption of energy efficiency and generation standards related to the Energy Policy Act of 2005, Dockets No. 2005-385-E and No. 2005-386-E, April, 2007.
- Presented testimony before the North Carolina Public Utilities Commission on behalf of Duke Energy and Progress Energy Carolinas in the investigation of adoption of energy efficiency and generation standards related to the Energy Policy Act of 2005, Docket No. E-100, Sub 108 November, 2006.

- Presented testimony before the North Carolina Public Utilities Commission on behalf of Duke Energy in the investigation of Duke Energy's 2006 Integrated Resource Plan, Docket No. E-100, Sub 103, June, 2006.
- Provided testimony for Georgia Power in its 2005 Fuel Adjustment Hearing on the issue of the appropriate pricing methodology for the dispatch and sale of electricity in the Southern Company system, Docket number 19142-U, April, 2005.
- Presented testimony on behalf of South Carolina Electric and Gas Company before the South Carolina Public Utility Commission for South Carolina Pipeline Company related to the inclusion of a generating plant in rate base and to the recovery of RTO (Gridsouth) related costs, Docket No. 2004-178-E, October, 2004.
- Presented testimony on behalf of Entergy Mississippi before the Mississippi civil court dealing with maintaining the confidentiality of special use contracts, August, 2004.
- Presented rebuttal testimony before the South Carolina Public Utility Commission for South Carolina Pipeline Company related to the reasons for continuing a program that allows flexible, competitive based pricing for large, interruptible customers that have alternative fuels, Docket No. 2004-6-G, May 29, 2004.
- Presented testimony before the Georgia Public Service Commission on the appropriate range for a return on equity earnings band (a form of performance based regulation) to set in a Savannah Electric & Power Company rate case, Docket No. 14618-U, April, 2002.
- Presented testimony before the Georgia Public Service Commission on behalf of Scana Energy Marketing related to affiliate relationships and the appropriate affiliate rules between Atlanta Gas Light Company's regulated and unregulated affiliates. Docket No. 146060-U, August 24, 2001.
- Presented testimony before the North Carolina Public Utilities Commission on behalf of SCANA Corporation regarding issues related to market power the appropriate affiliate relationship protections necessary in its merger with Public Service Company of North Carolina, Docket No. G-5, Sub 400; G-3, Sub 0.
- Presented testimony before the South Carolina Public Service Commission on behalf of South Carolina Pipeline Corporation regarding issues related to its annual review of gas costs as reflected in its purchase gas adjustment charge, Docket No. 1999-007-G, September, 1999.
- Presented testimony to the South Carolina Public Utility Commission for South Carolina Pipeline Corp. related to acquisition adjustments and regulatory policies related to performance based regulation, Docket No. 90-588-G, June, 1998.

- Testified before the Mississippi Public Service Commission on issues related to the establishment of retail electric competition, including ISO establishment, regional power exchanges, legislation, taxes and regulatory policies, April 16, 17, 1997.
- Support of Transition Proposals filed by Virginia Power Corporation, March, 1997.
- Entergy Arkansas testimony in support of Transition to Competition Filing, 1997.
- Entergy Louisiana testimony in support of Transition to Competition Filing, 1997.
- Support of Performance Based Regulation for GTE South Inc., Docket No. P-19, Sub 277, before the North Carolina Utility Commission, filed Nov. 22, 1995.
- Stranded Cost Regulatory Policy and Recovery Testimony before the South Carolina Public Service Commission, the Commission approved the request Dr. Wright was advocating, Docket No. 95-1000-E, October 27, 1995.

## **Education**

Dr. Wright received a Ph.D. in Economics from North Carolina State University, focusing on regulatory and environmental economics, and is a member of the honor society. He received an MBA in finance from Georgia State University in 1978, graduating with honors. He received a Master of Economics from North Carolina State University in 1991 and was a member of the honor society. He received a B.S. in Chemistry from Valdosta State College in Valdosta, Georgia, graduating Magna Cum Laud.

In addition, he has completed the Michigan State University Regulatory Course, several other NARUC courses on regulation, been an instructor on regulatory issues at several NARUC courses, completed management courses at Corning Glass and financial seminars at Bank Boston and Merrill Lynch dealing with regulation.

**FILED**  
**MAR 31 2008**  
Clerk's Office  
N.C. Utilities Commission

**BEFORE THE**  
  
**NORTH CAROLINA UTILITIES COMMISSION**  
  
**PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.**

**DOCKET NO. G-5, SUB 495**

**DIRECT TESTIMONY**  
  
**OF**  
  
**SHARON D. BOONE**

**MARCH 31, 2008**

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A. My name is Sharon D. Boone. My business address is 800 Gaston Road, Gastonia,  
3 North Carolina 28056.

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

5 A. I am employed by SCANA Services, Inc. ("SCANA Services"), a subsidiary of  
6 SCANA Corporation ("SCANA"), and serve as the Public Service Company of North  
7 Carolina, Inc. ("PSNC Energy" or the "Company") business unit controller.

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

10 A. I graduated cum laude from Appalachian State University in 1975 with a Bachelor of  
11 Science Degree in Business Administration. In July 1980, I became a Certified Public  
12 Accountant. I was employed in 1975 by Piedmont Natural Gas Company in Charlotte  
13 and, for the next seven years, worked in its subsidiary accounting, staff accounting, and  
14 tax departments. I joined PSNC Energy in 1982 as a Staff Accountant and was  
15 promoted to Assistant Manager-Plant Accounting in 1983; Manager-Plant Accounting  
16 in 1984; Manager-Plant Accounting and Tax Services in 1990; Director-Corporate  
17 Accounting in 1992 and Controller and Assistant Secretary in 1995. As an employee of  
18 SCANA Services since 2000, I have continued in my role as controller of the PSNC  
19 Energy business unit.

20 Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THIS  
21 COMMISSION?

22 A. Yes, in Docket No. G-5, Sub 337; Docket No. G-5, Sub 386; and Docket No. G-5, Sub

1 481.

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

3 A. My testimony presents the accounting exhibits and data necessary to support PSNC  
4 Energy's requested cost of service and rate base. It does not address revenue  
5 requirements or cost of gas, which are included in Candace A. Paton's testimony. The  
6 following exhibits are included with my testimony.

7 Exhibit 1 End of Period Net Investment

8 Exhibit 2 Accumulated Depreciation and Amortization

9 Exhibit 3 Materials and Supplies

10 Exhibit 4 Working Capital

11 Exhibit 5 Statement of Net Operating Income

12 Exhibit 6 Statement Showing Rates of Return

13 Exhibit 7 Balance Sheet and Income Statement

14 Q. PLEASE EXPLAIN EXHIBIT 1.

15 A. Page 1 of Exhibit 1 is a summary of PSNC Energy's total end-of-period net investment  
16 as of December 31, 2007, in the amount of \$691,214,257. Gross utility plant in service  
17 as of December 31, 2007, is presented on pages 2 and 3, and the total amount at the end  
18 of the test year was \$1,147,500,276.

19 Q. PLEASE EXPLAIN EXHIBIT 2.

20 A. Exhibit 2 is a schedule of PSNC Energy's Accumulated Provision for Depreciation and  
21 Amortization on Utility Plant in Service as of December 31, 2007, in the amount of  
22 \$414,361,078. The schedule is presented by plant account and current depreciation

1 rates are presented for each account. The current depreciation rates are those from the  
2 study prepared by Gannett Fleming, Inc. based on plant in service as of December 31,  
3 2005 that were approved by the Commission in Docket No. G-5, Sub 481, PSNC  
4 Energy's last general rate case.

5 Q. PLEASE EXPLAIN EXHIBIT 3.

6 A. Exhibit 3 presents both the end-of-period and 13-month average balances of materials  
7 and supplies for the test year ended December 31, 2007. The average balance of  
8 \$83,231,701 is used in the computation of working capital on page 1 of Exhibit 4.

9 Q. PLEASE EXPLAIN EXHIBIT 4.

10 A. Exhibit 4 presents PSNC Energy's calculated working capital allowance of  
11 \$62,997,642 included in net investment on Exhibit 1. The first component of  
12 \$9,988,308 is the result of PSNC Energy's lead-lag analysis found in Form G-1, Item  
13 26. Because PSNC Energy performed an in-depth lead-lag analysis in its last general  
14 rate case, it has used the Commission approved lead-lag days from that analysis, with  
15 the exception of revenue lag days and interest expense on short-term debt lag days.  
16 Revenue lag days estimate the time from when PSNC Energy renders gas service until  
17 it collects the bill from its customer. PSNC Energy's analysis of the revenue lag days  
18 showed an improvement of 3.12 days, from 42.65 days to 39.53 days. The lead-lag  
19 days were then applied to PSNC Energy's cost of service during the test year to  
20 estimate the investor supplied cash working capital. Other additions to working capital  
21 include average materials and supplies and average gas inventories (as shown in  
22 Exhibit 3) and average prepayments. The working capital allowance has been reduced  
23 by the 13-month average for the test year of customer deposits, interest accrued on

1 customer deposits, accrued vacation liability, state excise taxes, the deferred credit  
2 Treasury A account (tracks the clearing of customer refund checks) and for several  
3 cost-free capital items.

4 Q. PLEASE EXPLAIN EXHIBIT 5.

5 A. Exhibit 5 is a statement of net operating income per books for the year ending  
6 December 31, 2007, in the amount of \$54,205,174.

7 Q. PLEASE EXPLAIN EXHIBIT 6.

8 A. Page 1 of Exhibit 6 summarizes PSNC Energy's operating income and end-of-period  
9 rate of return on three bases – per books (column 1), after adjustments (column 3), and  
10 after the proposed rate increase (column 5). Column 2 includes the accounting and pro  
11 forma adjustments necessary to state expenses and utility plant on a going-level basis;  
12 and column 4 shows the adjustments for the proposed rate increase. Corresponding  
13 capitalization statements for columns 1, 3, and 5 are presented on page 2 of the Exhibit,  
14 and the proposed adjustments from columns 2 and 4 are listed on pages 3 and 4.

15 Q. PLEASE EXPLAIN THE ADJUSTMENTS, BEGINNING WITH ADJUSTMENT 1  
16 IN COLUMN 2 OF EXHIBIT 6, PAGE 1.

17 A. **Adjustment 1** increases gas sales and transportation revenues by \$109,882,358 based  
18 on sales quantities and amounts supplied to me by Ms. Paton. The computation of pro  
19 forma revenues from the sale and transportation of gas can be found in Form G-1, Item  
20 4.

21 **Adjustment 1.1** increases other operating revenues for anticipated growth in  
22 customers.

23 **Adjustment 2** annualizes the cost of gas at PSNC Energy's present \$8.75 per



1 dekatherm “benchmark” commodity price. This adjustment also includes the fixed gas  
2 costs. All of PSNC Energy’s gas costs are subject to an annual prudence review  
3 pursuant to the Commission’s Order in Docket No. G-100, Sub 58, dated April 9, 1992.  
4 The computation of pro forma cost of gas can be found in Form G-1, Item 4.

5 **Adjustment 3** increases operation and maintenance (“O&M”) expenses by \$3,689,580.

6 This adjustment reflects 19 separate adjustments, as follows:

- 7 **A.** An increase in PSNC Energy’s O&M payroll costs to annualize salaries in effect as  
8 of December 31, 2007 and to recover the 3% merit pay increases awarded to non-  
9 union employees February 2008, and anticipated union salary changes to become  
10 effective December 2008. It also includes increases in salaries charged to PSNC  
11 Energy by SCANA Services. SCANA Services provides administrative services  
12 such as legal, accounting, human resources, information systems, and call center  
13 support. This increase in salaries was 3% of the amounts charged to PSNC Energy  
14 during the test year. The 3% increase is representative of the merit salary  
15 adjustments awarded to eligible non-union employees in February 2008;
- 16 **B.** Reclassification of interest expense on customer deposits as an operating expense as  
17 approved in prior general rate cases;
- 18 **C.** An increase in the regulatory fee, which is based upon the above adjustment to  
19 revenues;
- 20 **D.** An increase in pension costs to reflect the most current actuarial analysis;
- 21 **E.** A decrease in Other Postretirement Employee Benefit (“OPEB”) costs, principally  
22 health care benefits, to match the amounts to be accrued for these future expenses  
23 under the Company’s most recent actuarial study;

- 1       **F.** An increase in 401(k) expenses and other employee benefits related to the above  
2       changes in compensation;
- 3       **G.** An increase in uncollectibles expense based on adjusted test year revenues;
- 4       **H.** An increase to reflect additional customer accounts expense resulting from the  
5       customer growth portion of Adjustment 1 as discussed in Ms. Paton's testimony;
- 6       **I.** A decrease in test year expenses related to the amortization over 3 years of the  
7       balance of prudently incurred environmental compliance costs associated with  
8       manufactured gas plant costs. These costs have been properly accounted for, and  
9       the treatment sought for them is as approved in prior Commission Orders;
- 10      **J.** An increase in test year expenses related to the amortization over 3 years of the  
11      balance of rate case expenses;
- 12      **K.** An increase in the amortization over 3 years of the balance of deferred Pipeline  
13      Integrity Management expenses. The Commission's Order in Docket No. G-5, Sub  
14      481, states that "it is appropriate to continue until the resolution of PSNC Energy's  
15      next general rate case proceeding the regulatory asset treatment for costs paid to  
16      outside contractors and outside consultants incurred as a result of the Pipeline  
17      Safety Improvement Act of 2002 and necessary for compliance with current federal  
18      regulations, pending the establishment of an appropriate recovery mechanism in a  
19      future proceeding." PSNC Energy is proposing that it be allowed to continue the  
20      regulatory asset treatment of pipeline integrity costs that the Commission approved  
21      in Docket No. G-5, Sub 481. PSNC Energy has not completed the "baseline" (or  
22      first round) assessments of its transmission pipeline system. In 2008, PSNC Energy  
23      expects to examine 60 miles of pipeline using "smart pigging" methods. In prior

1 years, PSNC Energy has averaged about 15 miles of assessments using the direct  
2 assessment method. PSNC Energy recommends continuing the deferral of these  
3 costs until the baseline assessments are completed on its entire system. While the  
4 regulatory deadline for completing baseline assessments is 2012, PSNC Energy  
5 expects to complete its first round of assessments in 2010, although assessment  
6 discoveries could extend this timeframe. The Company properly accounted for  
7 these prudently incurred costs;

8 **L.** An increase to recognize inflation occurring in O&M accounts which are not  
9 adjusted or annualized individually. The 2.13% inflation factor utilized was based  
10 upon the 2008 Consumer Price Index, which is a measure of the expected change in  
11 the prices of consumer durable goods and services;

12 **M.** A decrease in O&M expenses for the flow-back of previously amortized excess  
13 accumulated deferred income taxes ("EDIT") per Commission order in Docket No.  
14 G-5, Sub 481. A 3-year amortization period is proposed for the remaining excess  
15 balance as of November 1, 2008;

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

17 **O.** A decrease in meter reading expenses due to the automated meter reading project;

18 **P.** An increase for the cost of fuel (gasoline and diesel) over that recorded in the test  
19 year;

20 **Q.** An increase in postage expenses to reflect the change in the postal rate that is  
21 effective May 2008;

22 **R.** A decrease in the amortization of expenses related to the balance of workers  
23 compensation losses as approved by the Commission in PSNC Energy's last general

1 rate case;

2 S. An increase in employee bonuses to the current accrual level for book accounting  
3 purposes.

4 **Adjustment 4** is a net increase to depreciation expense actually recorded in the test  
5 year. It reflects the reduction of depreciation on end of period plant due to a significant  
6 retirement of software costs in 2007 and due to expenses allocated to non-utility  
7 operations. This reduction is more than offset by an increase in net plant additions  
8 anticipated through June 30, 2008 and an anticipated increase in depreciation allocated  
9 to PSNC Energy by SCANA Services reflecting end of period plant and anticipated  
10 plant additions through June 30, 2008.

11 **Adjustment 5** increases general taxes for ad valorem taxes on adjusted plant balances  
12 and for FICA taxes related to the wage increases.

13 **Adjustments 6 and 7** record state and federal income taxes, respectively, related to all  
14 of the other adjustments. They also reflect a savings from the interest expense on long-  
15 term and short-term debt, which are not included in the cost of service.

16 **Adjustment 8** is the reduction in the investment tax credit to reflect the amortization of  
17 deferred amounts expected to be recognized for calendar year 2008.

18 **Adjustment 8.1** is the reduction to the amortization of plant and non-plant related  
19 EDIT continuing the methodology approved in the Commission's order in Docket No.  
20 G-5, Sub 481. The plant related amortization reflects the anticipated amount for book  
21 accounting purposes in calendar 2008 and the annual amortization of the non-plant is  
22 based on a 3-year amortization of the balance as of November 1, 2008. Also included in  
23 this adjustment is the removal of tax savings during the test year of \$449,806 that relate

1 to the tax gross-up of the flow-back of previously amortized EDIT that are currently  
2 being amortized over a 5-year period per the Commission's order in Docket No. G-5,  
3 Sub 481. PSNC Energy is requesting the same treatment of this flow-back, which is to  
4 reduce O&M for the amortization of this excess as discussed in Adjustment 3-M above.  
5 The reduction to O&M reduces the revenue requirement discussed in adjustment 13,  
6 which reduces the applicable federal and state income tax adjustments discussed in  
7 adjustments 15 and 16, i.e., the tax gross-up related to the flow-back of EDIT.

8 **Adjustment 9** increases utility plant for estimated net additions through June 30, 2008,  
9 and decreases utility plant for an allocation to non-utility plant.

10 **Adjustment 10** increases the reserve for depreciation and amortization of utility plant  
11 for the anticipated change between the end of the test year and June 30, 2008, net of an  
12 allocation to non-utility plant.

13 **Adjustment 11** is an increase to working capital for the projected decrease in the  
14 OPEB accrual discussed in adjustment 3-E above.

15 **Adjustment 12** is an increase in deferred taxes for the anticipated change between the  
16 end of the test year and June 30, 2008, net of an allocation to non-utility operations.

17 **Adjustments 13 through 16** in column 4 on page 1 of Exhibit 6 reflect the revenue  
18 increase from the sale and transportation of gas of \$20,441,501 and is the increase  
19 required to give PSNC Energy the opportunity to earn the rate of return requested in  
20 this proceeding. Adjustments 14 through 16 reflect changes in regulatory fees,  
21 uncollectibles expense, and state and federal income taxes resulting from the proposed  
22 revenue increase. These adjustments increase net operating income by \$12,305,909  
23 and will produce a return on investment of 9.36% and a return on common equity of

1 12.0%.

2 Q. PLEASE EXPLAIN EXHIBIT 7.

3 A. Page 1 of Exhibit 7 is PSNC Energy's balance sheet as of December 31, 2007, and page  
4 2 is its income statement for the twelve months ended December 31, 2007.

5 Q. EXPLAIN HOW PSNC ENERGY HAS TREATED THE BOOK ACCOUNTING  
6 ADJUSTMENTS RELATED TO SFAS NO. 158.

7 A. In September 2006, the Financial Accounting Standards Board ("FASB") issued its  
8 Statement of Financial Accounting Standards ("SFAS") No. 158, entitled "Employers'  
9 Accounting for Defined Benefit Pension and Other Postretirement Plans." It requires  
10 an employer to recognize the overfunded or underfunded status of a defined benefit  
11 pension or other postretirement plan as an asset or liability in its statement of financial  
12 position and to recognize changes in that funded status in the year which changes occur  
13 through accumulated other comprehensive income. PSNC Energy filed a request in  
14 Docket No. G-5, Sub 485 on December 8, 2006 requesting the Commission's approval  
15 to "place all impacts to its other comprehensive income caused by adoption of SFAS  
16 No. 158 in regulatory deferred accounts". The Commission's order dated January 5,  
17 2007 approved this request. It also stated "adoption of SFAS 158 and approval of the  
18 deferred accounting treatment proposed by PSNC Energy shall have no impact on  
19 PSNC Energy's operating results or return on rate base for regulatory purposes and that  
20 the net effect of the deferred accounting allowed shall be to reset PSNC Energy's rate  
21 base, net operating income for return, and regulatory return on common equity to the  
22 same levels as would have existed had SFAS 158 not been implemented." As of  
23 December 31, 2007, PSNC Energy had recorded a regulatory asset of \$7,464,258

1 related to SFAS No. 158. Offsets were posted to pension assets, postretirement  
2 liabilities and deferred income taxes. The impact of SFAS No. 158 was removed from  
3 all accounts before computing PSNC Energy's rate base, net operating income and  
4 common equity.

5 Q. HAS PSNC ENERGY RECORDED ANY OTHER ACCOUNTING ADJUSTMENTS  
6 RELATED TO THE ADOPTION OF ACCOUNTING PRONOUNCEMENTS THAT  
7 YOU WOULD LIKE TO DISCUSS?

8 A. Yes. PSNC Energy has ignored the book accounting impact of FASB's Interpretation  
9 No. 47 entitled "Accounting for Conditional Asset Retirement Obligations" ("FIN 47")  
10 as of December 31, 2007 in the computation of rate base, net operating income for  
11 return and regulatory return on common equity in accordance with the Commission's  
12 order in Docket No. G-5, Sub 474, dated January 11, 2006. This order authorized  
13 PSNC Energy "to place in regulatory deferred accounts any differences in its income  
14 statement caused by the adoption of FIN 47". It also states that "adoption of FIN 47  
15 and approval of the deferred accounting treatment proposed by PSNC Energy shall  
16 have no impact on PSNC Energy's operating results or return on rate base for  
17 regulatory purposes and that the net effect of the deferred accounting allowed shall be  
18 to reset PSNC Energy's rate base, net operating income for return, and regulatory  
19 return on common equity to the same levels as would have existed had FIN 47 not been  
20 implemented". As of December 31, 2007, PSNC Energy had recorded an asset  
21 retirement obligation ("ARO") of \$12,073,787 and a regulatory deferred asset of  
22 \$9,518,629, with the difference booked in utility plant and accumulated depreciation.

23 Q. DOES THIS COMPLETE YOUR PREFILED DIRECT TESTIMONY?

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



**FILED**  
**MAR 31 2008**  
Clerk's Office  
N.C. Utilities Commission

BEFORE THE  
  
NORTH CAROLINA UTILITIES COMMISSION  
  
PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 495

EXHIBITS  
  
TO ACCOMPANY THE DIRECT TESTIMONY  
  
OF  
  
SHARON D. BOONE

MARCH 31, 2008

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
DOCKET NO. G-5, SUB 495  
END OF PERIOD NET INVESTMENT  
December 31, 2007

Plant and properties (Page 3)	\$1,147,500,276
Accumulated depreciation (Boone Exhibit No. 2)	(414,361,078)
Working capital (Boone Exhibit No. 4)	62,997,642
Deferred income taxes (G-1, Item 17c)	<u>(104,922,583)</u>
Total end of period net investment	<u><u>\$691,214,257</u></u>

**PSNC Energy**  
**Plants and Properties at Original Cost**  
**For Test Year Ended December 31, 2007**

Utility Plant Account	Utility Plant in Service (1180210+1180260)
<b>Gas Intangible Plant: 1180210 + 1180260</b>	
4020 - Gas Franchises and Consents	\$18,088.94
4021 - Franchises FPC - Non-Depr	\$196,307.55
4030 - Miscellaneous Intangible Gas	\$137,003.40
4032 - Misc Intangible Midland Stat	\$166,316.74
<b>Total Intangible Plant</b>	<b>\$517,716.63</b>
<b>Liquified Natural Gas Storage Plant: 1180210 + 1180260</b>	
4600 - LNG Land and Land Rights-Gas	\$819,328.67
4610 - LNG Structures&Improvements	\$2,883,962.57
4620 - LNG Gas holders - Gas	\$6,240,736.38
4630 - LNG Purification Equipment Gas	\$497,659.88
4631 - LNG Liquefaction Equipment-Gas	\$1,537,774.27
4632 - LNG Vaporizing Equipment - Gas	\$4,014,817.26
4633 - LNG Compressor Equipment-Gas	\$1,881,899.41
4634 - LNG Measuring/Reg Equip - Gas	\$107,998.85
4635 - LNG Other Equipment - Gas	\$379,292.65
<b>Total Storage Plant</b>	<b>\$18,363,469.94</b>
<b>Gas Transmission Plant: 1180210 + 1180260</b>	
4652 - Gas Transmission Land Rights	\$3,068,129.06
4653 - Gas Land-Compressor Stations	\$369,331.32
4654 - Gas Land-Take-Off Station	\$448.26
4655 - Gas Land-M & R Station	\$404,528.86
4656 - Gas Land-Regulating Station	\$809,635.10
4657 - Gas Land-Main Line Station	\$219.69
4658 - Gas Land - Farm Tap	\$3,654.59
4659 - Gas Land - Transmission Main	\$0.00
4663 - Stru & Imp Gas-Compress Stat	\$692,307.58
4664 - Stru & Impr Gas- Take-Off St	\$165,696.07
4665 - Stru & Impr Gas- M & R Stat	\$99,956.53
4666 - Stru & Impr Gas- Reg Station	\$74,190.71
4667 - Stru & Impr Gas- Main Line	\$10,479.76
4668 - Stru & Impr Gas- Farm Taps	\$2,471.69
4670 - Transmission Mains Gas	\$104,617,575.57
4680 - Compressor Station Equip Gas	\$9,640,832.43
4694 - Take-Off Station Equip Gas	\$1,271,037.91
4695 - M & R Station Equip Gas	\$4,575,616.60
4696 - Regulating Station Equip Gas	\$5,106,940.74
4697 - Main Line Industrial Equip Gas	\$1,108,506.55
4698 - Farm Tap Equipment Gas	\$6,164,615.22
4700 - Communication Eq Gas Trans	\$1,350,639.47
<b>Total Transmission Plant</b>	<b>\$139,536,813.71</b>
<b>Gas Distribution Plant: 1180210 + 1180260</b>	
4741 - Gas Distribution Land Owned	\$6,697,609.10

**PSNC Energy**  
**Plants and Properties at Original Cost**  
**For Test Year Ended December 31, 2007**

<b>Utility Plant Account</b>	<b>Utility Plant in Service (1180210+1180260)</b>
4742 - Gas Distribution Land Rights	\$460,864.80
4750 - Gas Distrib Str & Impr MAJOR	\$22,779,038.21
4751 - PSNC OTHER Str & Imp Nov 1 06	\$985,738.15
4761 - Gas Plastic Distrib Main	\$317,045,614.01
4762 - Gas Cast Iron Distrib Main	\$211,633.98
4763 - Gas Steel Distribution Main	\$196,892,325.68
4781 - District Regulating Equip Gas	\$4,684,526.48
4801 - Gas Services - PlasticPSNC	\$227,728,143.10
4802 - Gas Services - Steel PSNC	\$31,478,402.65
4810 - Gas Meters Distribution	\$49,625,295.86
4811 - ERTforPSNC	\$25,434,154.59
4820 - Gas Meter InstallationsPSNC	\$29,387,019.81
4850 - Industrial M&R Equip-GasPSNC	\$12,362,046.09
4860 - Other Propty-Cust Prem - Gas	\$0.00
4870 - Other Equipment	\$1,549,298.13
<b>Total Distribution Plant</b>	<b>\$927,321,710.64</b>
<b>Gas General Plant: 1180210 + 1180260</b>	
4891 - Gas General Land Owned	233,440.27
4900 - Structures & Improvmts - Gas	6,145,804.37
4903 - Gas Energy Equipment	0.00
4911 - Office Furn & Equip, Gas	5,938,777.83
4912 - Info Sys (EDP) Equip, Gas	0.00
4914 - Not Valid-PSNC Software	0.00
4915 - Vintage Computer Equipment	4,247,553.43
4916 - Vintage Remote Meter Reading	1,842,118.33
4917 - PSNC Software Balance 10 31 06	1,870,547.11
4918 - PSNC Software - Eff Nov 1 06	1,864,577.70
4921 - Automobiles, Gas	0.00
4924 - Trucks	18,909,856.64
4927 - Trailers, Gas	999,401.02
4930 - Stores Equipment, Gas	386,758.55
4940 - Tools, Shop&Garage Eq - Gas	644,892.32
4945 - CNG Refuel Stat Bal 10 31 2006	766,714.72
4946 - NonSpec Tools/Shop/Gar - Gas	4,047,750.92
4950 - Laboratory Equipment - Gas	21,050.83
4960 - Power Operated Equipmnt, Gas	6,979,674.41
4961 - NonSpecific Vintage POE-Gas	730,691.03
4970 - Communication Equipment, Gas	5,869,860.53
4971 - Radio Towers - Gas	155,609.18
4980 - Miscellaneous Equipment, Gas	105,485.50
<b>Total General Plant</b>	<b>\$61,760,564.69</b>
<b>Total Utility Plant in Service: 1180210 + 1180260</b>	<b>\$1,147,500,275.61</b>

**PSNC ENERGY**  
**Docket G-5, Sub 495**  
**DEPRECIATION AND AMORTIZATION**  
**Schedule Showing Accumulated Depreciation and Amortization Balances**  
**Annual Rates and Methods of Computing Amounts**

A	B	C
Account Title	Accumulated Depreciation or Amortization (12/31/2007)	Straight- Line Annual Rate %
<b>1 PSNC INTANGIBLE PLANT 1190001</b>		
PSNC 4020 Franchise & Consents	\$13,086.35	Various
PSNC 4021 Franchises FPC Non-Depr	\$0.00	Depreciated
PSNC 403 Misc Intangible	\$57,539.55	2.50%
PSNC 4032 Midland Station	\$9,218.43	3.20%
<b>Total Intangible Plant</b>	<b>\$79,844.33</b>	
<b>2 PSNC STORAGE PLANT 1190270</b>		
PSNC 461 Structures & Improvements	\$2,407,640.86	0.87%
PSNC 4620 Gas Holders	\$5,312,429.12	1.55%
PSNC 4621 Nat Gas Holders Non-Depr	\$0.00	Depreciated
PSNC 4630 Purifaction Equipment	\$472,776.89	Depreciated
PSNC 4631 Liquefaction Equipment	\$1,176,234.71	1.34%
PSNC 4632 Vaporizing Eq Non-Depr	\$3,415,494.03	0.77%
PSNC 4633 Compressor Equipment	\$1,266,278.88	6.33%
PSNC 4634 M & R Equipment	\$97,732.63	0.48%
PSNC 4635 Other Equipment	\$306,020.74	0.98%
<b>Total Storage Plant</b>	<b>\$14,454,607.86</b>	
<b>3 PSNC TRANSMISSION PLANT 1190270</b>		
PSNC 4652 Rights-of-Way	\$1,171,113.69	0.98%
PSNC 4656 Land Reg Station	\$92.41	non-depr
PSNC Future Use Land	(\$2,314.39)	non-depr
PSNC 4663 Str & Imp Compressor Stat	\$443,800.99	1.02%
PSNC 4664 Str & Impr City Gate	\$63,182.36	1.67%
PSNC 4665 Str & Impr M & R Station	\$43,954.17	0.10%
PSNC 4666 Str & Impr Reg Station	\$60,313.61	1.03%
PSNC 4667 Str & Impr Main Line	\$2,423.16	0.25%
PSNC 4668 Str & Impr Farm Taps	\$30.18	2.64%
PSNC 467 Transmission Mains	\$38,843,776.92	1.35%
PSNC 468 Compressor Equipment	\$5,277,363.58	1.75%
PSNC 4694 City Gate Station Equip	\$486,146.58	4.32%
PSNC 4695 M & R Station Equip	\$1,780,577.35	2.29%
PSNC 4696 Regulating Station Equip	\$899,009.93	3.28%
PSNC 4697 Main Line Industrial Stat	\$381,875.97	3.06%
PSNC 4698 Farm Tap Equip	\$1,130,468.49	6.47%
PSNC 470 Telemetrying Equipment	\$833,261.60	5.17%
<b>Total Transmission Plant</b>	<b>\$51,415,076.60</b>	
<b>4 PSNC DISTRIBUTION PLANT 1190270</b>		
PSNC 4742 Land Rights Non-Depr	\$9,419.26	1.53%
PSNC 4750 Structures & Equipment Major	\$6,297,585.45	2.43%
PSNC 4751 Structures & Equipment Other	\$587,091.29	0.88%
PSNC 4761 Plastic Distribution Main	\$71,811,307.77	2.68%
PSNC 4762 Cast Iron Distrn Main	(\$39,942.59)	3.59%
PSNC 4763 Steel Distribution Main	\$87,029,846.88	2.75%

**PSNC ENERGY**  
**Docket G-5, Sub 495**  
**DEPRECIATION AND AMORTIZATION**  
**Schedule Showing Accumulated Depreciation and Amortization Balances**  
**Annual Rates and Methods of Computing Amounts**

A	B	C
Account Title	Accumulated Depreciation or Amortization (12/31/2007)	Straight- Line Annual Rate %
PSNC 478 District Regulator	\$1,311,467.49	8.92%
PSNC 4801 Plastic Services	\$86,441,549.37	3.97%
PSNC 4802 Steel Services	\$30,996,463.64	2.73%
PSNC 481 Meters & Regulators	\$17,047,017.50	1.93%
PSNC 4811 ERT	\$1,599,247.74	6.72%
PSNC 482 Meter Installations	\$10,073,625.76	1.65%
PSNC 485 Industrial M & R Install	\$6,105,134.38	2.14%
PSNC 487 Other Distribution Equip	\$650,639.40	3.98%
<b>Total Distribution Plant</b>	<b>\$319,920,453.34</b>	
 <b>5 PSNC GENERAL PLANT 1190270</b>		
PSNC 490 Structures & Improvements	\$874,801.47	2.18%
PSNC 4911 Office Furniture & Equip	\$3,027,487.77	4.74%
PSNC 4915 Non-Spec Computer Eq	\$1,750,156.94	13.84%
PSNC 4916 Remote Meter Read-Metretk	\$403,040.37	6.73%
PSNC 4917 Software Balance 10/31/2006	\$329,572.11	37.45%
PSNC 4918 Software Effective 11/1/2006	\$185,745.53	20.00%
PSNC 4924 - Trucks Amortization	\$11,925,627.35	0.39%
PSNC 4927 - Trailer Amortization	\$439,147.01	0.39%
PSNC 493 Stores Equipment	\$216,441.57	4.09%
PSNC 4940 Tools/ Shop/Garage Eq	(\$297,153.90)	7.81%
PSNC 4945 CNG Refueling Stations	\$457,801.18	16.41%
PSNC 4946 Vintage Tools/Shop/Gar	\$1,978,850.31	3.35%
PSNC 495 Laboratory Equipment	\$13,599.77	5.40%
PSNC 4960 Specific POE	\$3,046,948.54	5.07%
PSNC 4961 Non-Specific POE	\$316,491.84	4.05%
PSNC 497 Communication Equipment	\$3,688,531.00	8.18%
PSNC 4971 Radio Towers	\$76,649.53	7.36%
PSNC 498 Miscellaneous Equipment	\$57,357.51	0.32%
<b>Total General Plant</b>	<b>\$28,491,095.90</b>	
 <b>Total Accumulated Depreciation</b>	 <b>\$414,361,078.03</b>	

Method Used: The Company Provides for depreciation on a straight-line remaining life basis by the application of specific rates to the various depreciable property accounts. The current rates have been approved by the North Carolina Utilities Commission. Depreciation amounts for transportation, stores and power operated equipment are charged to clearing accounts and allocated to operating expenses, construction and other accounts on the basis of the use of such equipment. Franchises and consents are amortized over their life.

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
DOCKET NO. G-5, SUB 495  
MATERIALS AND SUPPLIES

Line No.		Balance 12/31/2007	Thirteen Month Average for the Period Ended 12/31/2007
1	Materials and supplies	<u>\$6,816,531</u>	<u>\$6,609,100</u>
2	Natural gas in storage	<u>90,337,511</u>	<u>76,622,602</u>
3	Total	<u><u>\$97,154,042</u></u>	<u><u>\$83,231,701</u></u>

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
 FOR THE TEST YEAR ENDED DECEMBER 31, 2007  
WORKING CAPITAL

Per lead-lag study	\$ 9,988,308
Average materials and supplies (Boone Exhibit 3)	6,609,100
Average gas inventories (Boone Exhibit 3)	76,622,602
Average interest on deposits	(172,927)
Average customer deposits	(9,633,717)
Average prepayments	625,993
Average accrued vacation liability - PTO	(335,145)
Average accrued state excise taxes	(1,272,709)
Average deferred credit Treasury A account	(401,770)
Cost-free capital - Transco refunds	(258,000)
Cost-free capital - postretirement benefits other than pensions (FASB 106)	(18,006,684)
Cost-free capital - postemployment benefits (FASB 112)	(767,409)
Total working capital	<u>\$62,997,642</u>



PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
DOCKET NO. G-5, SUB 495  
STATEMENT OF NET OPERATING INCOME FOR RETURN

	Twelve Months Ended <u>December 31, 2007</u>
<b>Operating Revenues</b>	
Gas Sales	\$ 551,559,442
Transportation	22,533,350
Other operating revenues	<u>3,221,664</u>
Total operating revenues	577,314,456
<b>Operating Expenses</b>	
Purchased gas	377,921,183
Operating and maintenance	83,879,701
Depreciation	36,973,767
Taxes other than income	8,595,582
State income taxes	2,943,138
Federal income taxes	14,245,617
Amortization of investment credits	(237,550)
Amortization of excess ADIT	<u>(1,212,156)</u>
Total operating expenses	<u>523,109,282</u>
<b>Net operating income for return</b>	<u><u>\$ 54,205,174</u></u>

Public Service Company of North Carolina, Incorporated  
Operating Income for Return and End of Period  
For the Test Year Ended December 31, 2007

Line No	Twelve Months Ended 12/31/2007	Adjustments	After Adjustments	Adjustments For Proposed Revenues	After Adjustments For Proposed Changes
	(1)	(2)	(3)	(4)	(5)
<b>Operating Revenues:</b>					
1. Gas Sales and Transportation	574,092,792	109,882,358 (1)	683,975,150	20,441,501 (13)	704,416,651
2. Other Operating Revenues	3,221,664	123,511 (1.1)	3,345,175	0	3,345,175
3. Total Operating Revenues	577,314,456	110,005,869	687,320,325	20,441,501	707,761,826
<b>Operating Expenses:</b>					
4. Purchased Gas	377,921,183	98,958,803 (2)	476,879,986	0	476,879,986
5. Operating and Maintenance	83,879,701	3,689,580 (3)	87,569,281	106,198 (14)	87,675,479
6. Depreciation	36,973,767	582,017 (4)	37,555,784	0	37,555,784
7. General Taxes	8,595,582	748,892 (5)	9,344,474	0	9,344,474
8. State Income Taxes	2,943,138	855,247 (6)	3,798,385	1,403,136 (15)	5,201,521
9. Federal Income Taxes -	14,245,617	3,692,116 (7)	17,937,733	6,626,258 (16)	24,563,991
10. Amortization of ITC	(237,550)	52,297 (8)	(185,253)	0	(185,253)
11. Amortization of EDIT	(1,212,156)	566,731 (8.1)	(645,425)	0	(645,425)
12. Total Operating Expenses	523,109,282	109,145,682	632,254,964	8,135,592	640,390,556
13. Net Operating Income	54,205,174	860,187	55,065,361	12,305,909	67,371,270
14. Other Adjustments	0	0	0	0	0
15. Net Operating Income for Return	54,205,174	860,187	55,065,361	12,305,909	67,371,270
<b>End of Period Net Investment:</b>					
16. Utility Plant	1,147,500,276	43,784,947 (9)	1,191,285,223	0	1,191,285,223
17. Accumulated Depreciation	(414,361,078)	(13,456,733) (10)	(427,817,811)	0	(427,817,811)
18. Construction Work in Progress	0	0	0	0	0
19. Working Capital	62,997,642	41,954 (11)	63,039,596	0	63,039,596
20. Deferred Income Taxes	(104,922,583)	(1,436,829) (12)	(106,359,412)	0	(106,359,412)
21. End of Period Net Investment	691,214,257	28,933,339	720,147,596	0	720,147,596
22. Rates of Return	7.84%		7.65%		9.36%

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
STATEMENT SHOWING CAPITALIZATION AND RATES OF RETURN PER BOOKS  
FOR THE TEST YEAR ENDED DECEMBER 31, 2007

Line No		Capital Structure	Ratio %	End of Period Net Investment	Embedded Cost/Return	Overall Cost Rate	Net Operating Income
		(1)	(2)	(3)	(4)	(5)	(6)
1	Long-term Debt	262,800,000	35.89%	248,076,797	7.07%	2.54%	17,539,030
2	Short-term Debt	75,897,470	10.36%	71,609,797	3.55%	0.37%	2,542,148
3	Common Equity	393,567,000	53.75%	371,527,663	9.18%	4.93%	34,123,996
4	Total Capitalization	<u>732,264,470</u>	<u>100.00%</u>	<u>691,214,257</u>		<u>7.84%</u>	<u>54,205,174</u>

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
STATEMENT SHOWING RATES OF RETURN  
FOR THE TEST YEAR ENDED DECEMBER 31, 2007  
AFTER ACCOUNTING AND PRO FORMA ADJUSTMENTS AND EFFECT OF PROPOSED CHANGES

Line No		Capital Structure	Ratio %	End of Period Net Investment	Embedded Cost/Return	Overall Cost Rate	Net Operating Income
		(1)	(2)	(3)	(4)	(5)	(6)
1	Long-term Debt	262,800,000	35.89%	258,460,972	7.07%	2.54%	18,273,191
2	Short-term Debt	75,897,470	10.36%	74,607,291	3.55%	0.37%	2,648,559
3	Common Equity	393,567,000	53.75%	387,079,333	8.82%	4.74%	34,143,611
4	Total Capitalization	<u>732,264,470</u>	<u>100.00%</u>	<u>720,147,596</u>		<u>7.65%</u>	<u>55,065,361</u>

Line No		After Proposed Adjustments			
		(7)	(8)	(9)	(10)
5	Long-term Debt	258,460,972	7.07%	2.54%	18,273,191
6	Short-term Debt	74,607,291	3.55%	0.37%	2,648,559
7	Common Equity	387,079,333	12.00%	6.45%	46,449,520
8	Total Capitalization	<u>720,147,596</u>		<u>9.36%</u>	<u>67,371,270</u>

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
DETAIL OF ACCOUNTING AND PRO FORMA ADJUSTMENTS

Workpaper  
Reference

<b>1 Gas Sales and Transportation Revenues</b>		
Increase gas sales and transportation revenues based on sales quantities and amounts as shown on Paton Exhibit 3.	(1) <u>109,882,358</u>	1
<b>1.1 Other Operating Revenues</b>		
Increase due to customer growth	(1.1) <u>123,511</u>	1.1
<b>2 Purchased Gas</b>		
Increase to annualize on end-of-period rates	(2) <u>98,958,803</u>	2
<b>3 Operating and Maintenance</b>		
Adjustments to reflect:		
A. Increased wages	2,072,907	3-A
B. Interest on customer deposits as an operating expense	609,946	3-B
C. Regulatory fees increased for revenue adjustments	131,985	3-C
D. Increased pension cost	55,213	3-D
E. Postretirement costs other than pension increase	(41,954)	3-E
F. Increased 401K expenses and other misc employee benefits	162,723	3-F
G. Uncollectibles cost adjustment	654,688	3-G
H. Customer accounts expense increase for customer growth	174,529	3-H
I. Manufactured gas plant amortization	(17,773)	3-I
J. Rate case expense amortization	44,479	3-J
K. Pipeline integrity management amortization	292,835	3-K
L. Inflation adjustment to non-adjusted O&M expenses	435,184	3-L
M. Amortization of Excess ADIT	(743,297)	3-M
N. Decrease O&M for non-utility allocation	(153,671)	3-N
O. Decrease meter reading expenses due to AMR project	(1,117,156)	3-O
P. Increase to fuel costs for fleet	172,614	3-P
Q. Increase in postage	119,122	3-Q
R. Workers compensation amortization	(68,013)	3-R
S. Bonuses	905,219	3-S
	(3) <u>3,689,580</u>	
<b>4 Depreciation Expense</b>		
Decrease to reflect depreciation on end of period plant	(1,580,440)	4-A
Allocation to nonutility	(129,559)	4-B
Increase to give effect to estimated net plant additions	2,180,317	4-C
Increase to reflect depreciation on end of period Scana Services plant allocated to PSNC	64,932	4-D
Increase to give effect to estimated Scana Services net plant additions	46,767	4-E
	(4) <u>582,017</u>	
<b>5 General Taxes</b>		
Property taxes increased for increase in plant	593,839	5-A
FICA increase due to wage increase and amount subject to FICA	155,053	3-A
	(5) <u>748,892</u>	
<b>6 State Income Taxes</b>		
State income taxes normalized for proforma adjustments	(6) <u>855,247</u>	

<u>7 Federal Income Taxes</u>		
Federal income taxes normalized for proforma adjustments	(7) <u>3,692,116</u>	
8 To decrease amortization of ITC to the going level	(8) <u>52,297</u>	8
8.1 To decrease the amortization of excess ADIT to the going level	(8.1) <u>566,731</u>	8.1
<u>9 Utility Plant</u>		
Estimated net plant additions thru June 30, 2008	47,497,570	4-C
Allocation to nonutility	(3,712,623)	4-B
	(9) <u>43,784,947</u>	
<u>10 Accumulated Depreciation</u>		
Estimated increase to the reserve between test year and June 30, 2008	(14,929,419)	10
Decrease for nonutility	1,472,686	4-B
	(10) <u>(13,456,733)</u>	
<u>11 Working Capital</u>		
Increase for a reduction in expenses related to the postretirement liability	41,954	3-E
	(11) <u>41,954</u>	
<u>12 Deferred Income Taxes</u>		
Estimated increase between test year and June 30, 2008	(1,726,770)	12
Allocated to nonutility	289,941	4-B
	(12) <u>(1,436,829)</u>	
<u>13 Gas Sales and Transportation Revenues</u>		
Increase in revenues following adjustments	(13) <u>20,441,501</u>	
<u>14 Operating and Maintenance</u>		
Increase in regulatory fees following increase in revenues	(14) <u>106,198</u>	
<u>15 State Income Taxes</u>		
Increase for effect of previous adjustments	(15) <u>1,403,136</u>	
<u>16 Federal Income Taxes</u>		
Increase for effect of previous adjustments	(16) <u>6,626,258</u>	

Public Service Company of North Carolina, Inc.  
Unconsolidated Balance Sheet  
December 31, 2007

Boone Exhibit 7  
Page 1 of 2

<b>Assets and Other Debits:</b>	
Gas Utility Plant	1,152,480,743
Less Accum Deprec & Amortization	(415,787,048)
Total	736,693,695
Construction Work In Progress	12,408,923
Acquisition Adj, Net	209,823,656
Utility Plant, Net	958,926,274
<b>Other Property and Investments:</b>	
Investments and Advances to Subsidiaries	18,118,903
Other Investments	6,875
Total Other Prop & Investments	18,125,778
<b>Current Assets:</b>	
Cash, Temp Inv & Special Deposits	4,573,128
Accounts Receivable-Customers	113,173,791
Accounts Receivable-Other	6,640,616
Allow for Uncoll Accounts	(832,356)
Accounts Receivable-Associated Co	4,456,392
Inventories-Fuel	90,337,511
Inventories-Material & Supplies	8,411,506
Prepayments	1,507,302
Notes Receivable	227,792
Total Current Assets	228,495,682
<b>Deferred Debits:</b>	
Environmental	9,011,320
Unamortized Debt Expense	1,590,423
Other Regulatory Assets	68,542,657
Clearing Accounts	(1,786)
Misc Deferred Debits	1,695,984
Pension Asset and Other Benefits	1,497,928
Accum Deferred Income Taxes	7,619,696
Total Deferred Debits	89,956,222
<b>Total Assets and Other Debits</b>	<b>1,295,503,956</b>
<b>Liabilities and Other Credits:</b>	
<b>Stockholders' Investment:</b>	
Common Stock	1,000
Other Paid in Capital	649,660,716
Retained Earnings	(56,585,954)
Accumulated Other Comprehensive Income	(628,648)
Total Common Equity	592,447,115
<b>Long-Term Debt:</b>	
Other Long-Term Debt	266,578,457
Contra-Current Portion Other LTD	(3,200,000)
Long-Term Debt, Net	263,378,457
<b>Total Capitalization</b>	<b>855,825,572</b>
<b>Current Liabilities:</b>	
Notes Payable	156,900,000
Accounts Payable	66,748,943
Accounts Payable-Associated Co	354,971
Customer Deposits	9,998,376
Total Current Portion of LTD	3,200,000
Taxes Accrued-Federal Income	7,532,865
Taxes Accrued-State Income	(307,028)
Taxes Accrued-Other	1,149,120
Interest Accrued-LTD	5,483,646
Interest Accrued-Other	255,342
Dividends Declared	5,600,000
Tax Collections Payable	83,595
Miscellaneous Current Liabilities	17,378,456
Total Current Liabilities	274,378,276
<b>Deferred Credits:</b>	
Accumulated Deferred ITC	505,758
Accum Deferred Income Taxes	112,542,279
Other Regulatory Liabilities	6,807,105
Postemployment & Other Benefits	25,304,117
Other Asset Retirement Obligations	12,073,787
Other Deferred Credits	8,067,063
Total Deferred Credits	165,300,108
<b>Total Liabilities and Other Credits</b>	<b>1,295,503,956</b>

Public Service Company of North Carolina  
Unconsolidated Income Statement  
Twelve Months Ended December 31, 2007

Boone Exhibit 7  
Page 2 of 2

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<b>Operating Revenues:</b>	
Gas-Regulated	577,314,456
Total Operating Revenues	<u>577,314,456</u>
<b>Operating Expenses:</b>	
Gas for Resale-Regulated	377,921,183
Operating Expense Other	77,208,707
Maintenance Expense	6,670,994
Deprec and Amort Exp	36,973,767
Taxes Other than Income Tax	8,595,582
State Income Taxes	2,854,732
Federal Income Taxes	13,121,867
Amortization of Investment Credits	(237,550)
Total Operating Expenses	<u>523,109,282</u>
<b>Net Operating Income</b>	54,205,174
<b>Other Income:</b>	
Subsidiary Equity Earnings, net	2,482,242
Allowance for Equity Funds	710,694
Gain on Sale of Assets	25,350
Other Revenues	16,486,953
Other Expenses	(9,206,424)
Income Tax on Other Income	(2,901,302)
Total Other Income	<u>7,597,513</u>
Income Before Interest Charges	61,802,687
<b>Interest Charges:</b>	
Interest on Long-Term Debt	18,671,140
Amort of Debt Disc and Expense	266,020
Interest on Debt to Assoc Co	568,651
Other Interest Expense	7,319,939
Allowance for Borrowed Funds	(402,248)
Total Interest Charges	<u>26,423,502</u>
<b>Net Income</b>	35,379,185

**FILED**

**MAR 31 2008**

Clerk's Office  
N.C. Utilities Commission

BEFORE THE

NORTH CAROLINA UTILITIES COMMISSION

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 495

DIRECT TESTIMONY

OF

CANDACE A. PATON

MARCH 31, 2008



1 Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND CURRENT  
2 POSITION WITH PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

3 A. My name is Candace A. Paton. I am employed by SCANA Services, Inc. as Rates &  
4 Regulatory Manager for Public Service Company of North Carolina, Inc., d/b/a PSNC  
5 Energy ("PSNC Energy" or the "Company"). My business address is 800 Gaston  
6 Road, Gastonia, North Carolina 28056.

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

9 A. My qualifications and work experience are set forth in Appendix A immediately  
10 following this testimony.

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

12 A. The purpose of my testimony is to present the following:

- 13 1. Adjustments to test period revenues and cost of gas related to quantities of gas  
14 sold and transported during the test period;
- 15 2. The cost of service study used to support the proposed rate design;
- 16 3. The Company's proposed rate design;
- 17 4. Proposed Residential and Small General Service ("SGS") High-Efficiency rates;
- 18 5. Proposed changes in PSNC Energy's Rates, Rate Schedules, Riders, and  
19 Transportation Pooling Agreement;
- 20 6. Factors to be used in the Company's proposed Customer Usage Tracker  
21 adjustment mechanism ("CUT");
- 22 7. Proposed recovery of conservation and efficiency program expenses; and

1           8.    Recovery of the deferred residential rate differential from Docket No. G-5, Sub  
2                   481.

3       Q.   PLEASE DISCUSS THE PROPOSED ADJUSTMENTS TO TEST PERIOD  
4           REVENUES AND QUANTITIES OF GAS SOLD AND TRANSPORTED.

5       A.   Test period sales and transportation volumes have been adjusted to reflect normal  
6           weather and to reflect customer growth through June 30, 2008. Adjusted volumes were  
7           then priced at the current Tariff rates, exclusive of the current temporary decrements.  
8           These adjustments are set forth in Paton Exhibit 8. Detailed workpapers supporting the  
9           adjustments are contained in Item 4 of Form G-1.

10      Q.   PLEASE DISCUSS YOUR ADJUSTMENT TO TEST PERIOD VOLUMES TO  
11           REFLECT NORMAL WEATHER.

12      A.   Test period sales for residential and SGS customers were adjusted using 15-year  
13           normalized weather, instead of 30-year normalized weather used previously, to reflect  
14           more representative weather trends. This was done by using a heat sensitivity factor  
15           ("HSF") determined through statistical regression analysis of therm use per customer  
16           for each rate. The HSF equals the change in therm use per customer for a change of  
17           one heating degree day ("HDD"). In this proceeding we have used HDDs with a base  
18           temperature of 65 degrees. New base load and heat sensitive factors to be used in the  
19           Customer Usage Tracker as discussed later in my testimony are set forth in Paton  
20           Exhibit 9.

21      Q.   PLEASE DISCUSS HOW THE TEST PERIOD VOLUMES WERE ADJUSTED FOR  
22           CUSTOMER GROWTH.

1 A. Based on average customer growth for 2006 and 2007, test period volumes for  
2 residential customers were adjusted to reflect a residential growth rate of 4.21% and an  
3 SGS growth rate of 1.11%. Both adjust test period volumes to the period ending June  
4 30, 2008, consistent with adjustments to rate base and operating expenses.

5 Q. PLEASE DISCUSS YOUR PROPOSED ADJUSTMENTS TO TEST PERIOD COST  
6 OF GAS.

7 A. The determination of adjusted cost of gas is set forth in Paton Exhibit 10. Fixed  
8 transportation and storage charges were priced at current tariff rates. The commodity  
9 cost of gas was determined by applying the current commodity cost of gas of \$0.875  
10 per therm to the adjusted sales volumes on Paton Exhibit 8. In addition, Company Use  
11 and Lost and Unaccounted For ("LUAF") volumes were also priced at \$0.875 per  
12 therm. The LUAF volumes are reflected at 0.76% of annualized throughput. Gas cost  
13 was then decreased by \$4,582,684 to recognize the level of fixed gas cost, Company  
14 Use and LUAF amounts reflected in adjusted revenues based on current rates. The  
15 proposed Company Use and LUAF recovery rates are set forth on Paton Exhibit 12.

16 Q. IS THE COMPANY PROPOSING NEW FIXED GAS COST RECOVERY RATES?

17 A. Yes. As shown on Paton Exhibit 10, annualized fixed transportation and storage  
18 charges are \$68,593,678. The Company is proposing new fixed gas cost rates that are  
19 based on the current level of fixed gas costs net of anticipated annual secondary market  
20 credits. If fixed gas cost recovery rates are set based on gross fixed gas costs the  
21 Company will clearly have a cumulative over-recovered balance in its All Customers  
22 Deferred Account. The net fixed gas cost of \$60,565,386 was allocated to the various

1 customer classes using the fixed gas cost allocation percentages agreed to by the parties  
2 and approved by the Commission in the Company's last general rate case.

3 Q. HAVE YOU PREPARED A COST OF SERVICE STUDY FOR USE IN THIS  
4 PROCEEDING?

5 A. Yes. The per-books cost of service study summary is set forth in Paton Exhibit 5. An  
6 adjusted, or pro-forma, cost of service study summary under present rates is set forth in  
7 Paton Exhibit 6 and a pro-forma cost of service study summary under proposed rates is  
8 set forth in Paton Exhibit 7. Detailed workpapers supporting the pro-forma cost of  
9 service studies are included in Item 3 of the Form G-1 filed in this proceeding.

10 Q. PLEASE DISCUSS THE PURPOSE OF A COST OF SERVICE STUDY.

11 A. A cost of service study is used to determine the cost of providing service to the  
12 Company's various customer classes. The basic premise is to assign or apportion all of  
13 the Company's expenses and investments to the various customer classes that cause  
14 those investments to be made or costs to be incurred. The results of the study indicate  
15 the rates of return for those customer classes.

16 Q. PLEASE DESCRIBE THE STEPS USED TO DEVELOP THE COMPANY'S COST  
17 OF SERVICE STUDY.

18 A. The first step in any cost of service study is to separate the Company's expenses and  
19 rate base into one of the following functional categories: storage, transmission,  
20 distribution, general, intangible, and customer-related. Expenses and net plant were  
21 assigned directly to the functional classifications based on the Company's books and  
22 records. Revenues, expenses and rate base were then assigned to the various customer

1 classes by direct assignment, and where direct assignment was not possible, by  
2 allocation.

3 Q. PLEASE DESCRIBE IN GENERAL THE RESULTS OF THE COST OF SERVICE  
4 STUDY.

5 A. The per-books cost of service study showed that the Company earned an overall rate of  
6 return of 7.84% for the test period. After adjustments to update plant investment and  
7 recognize known and measurable changes in the Company's revenue and expense  
8 levels, the pro-forma cost of service study under present rates showed an overall return  
9 of 7.65%. The impacts of the proposed rate changes on customer class rates of return  
10 are shown in Paton Exhibit 7.

11 Q. PLEASE DESCRIBE THE COMPANY'S RATE DESIGN OBJECTIVES IN THIS  
12 PROCEEDING.

13 A. The Company's primary objective is to design rates that reflect appropriate ratemaking  
14 principles, are fair to the various customer classes and are sufficient to produce the  
15 revenue requirement found appropriate by the Commission. There are numerous other  
16 economic, supply, and policy principles to be considered in designing rates for specific  
17 customer groups. Among these are the following:

- 18 • Cost of service;
- 19 • Value of service and competitive conditions in the marketplace;
- 20 • Consumption characteristics of different customer classes;
- 21 • Simplicity and administrative ease;
- 22 • Margin stability.

1 Q. PLEASE SUMMARIZE THE COMPANY'S PROPOSED RATE DESIGN  
2 RECOMMENDATIONS IN THIS PROCEEDING.

3 A. Other than changes to the per-therm billing rates themselves, we are proposing to  
4 maintain our present rate structure with only minor changes.

5 Q. PLEASE DISCUSS THE COMPANY'S PROPOSED CHANGES TO ITS  
6 RESIDENTIAL RATES.

7 A. We are proposing to maintain the residential rate structure approved by the  
8 Commission in its Order on Reconsideration issued October 19, 2007 in Docket No. G-  
9 5, Sub 481. In that Order the Commission approved the Company's request to establish  
10 a single residential rate schedule, Rate 101, which has a summer/winter rate differential  
11 of six cents per therm. Additionally, we are proposing to increase the basic facilities  
12 charge ("BFC") from \$10.00 to \$12.00 per month.

13 Q. IS THE COMPANY PROPOSING TO INCREASE THE BFC FOR OTHER RATE  
14 CLASSES?

15 A. Yes. We are proposing to increase the BFC for Unmetered Lighting Service, Rate 115,  
16 from \$10.00 to \$12.00 per month and for SGS Rate 125 from \$17.50 to \$20.00 per  
17 month.

18 Q. WHAT IS THE COMPANY'S REASON FOR THE PROPOSED BFC INCREASES?

19 A. One goal of rate design is for the rates charged to reflect the costs incurred to provide  
20 service. The ideal rate structure for a gas local distribution company ("LDC") would be  
21 "straight fixed-variable". This type of structure recognizes that the vast majority of an  
22 LDC's costs are fixed and are not dependent on the quantity of gas consumed.

1        However, to fully implement such a structure would require a much higher BFC. In  
2        fact, the cost of service study would support a residential BFC of \$21.12 and an SGS  
3        BFC of \$49.20. This approach, although a valid rate design structure, would be difficult  
4        to implement due to lack of customer understanding and acceptance, and may not  
5        further the Company's goal of promoting conservation. We believe that the proposed  
6        BFC increases strike an appropriate balance of the customers' and Company's needs.

7        Q. PLEASE DISCUSS THE PROPOSED CHANGE TO RATE 195.

8        A. Rate 195 is our Natural Gas Vehicle Developmental Rate. This rate was closed to new  
9        customers in our last general rate case, Docket No. G-5, Sub 481. We currently have  
10       one customer on this rate that began service in November 2005 and will be moving off  
11       this rate in November 2008; therefore, we propose to eliminate this rate.

12       Q. PLEASE DISCUSS THE PROPOSED CHANGES TO THE COMPANY'S  
13       UNMETERED LIGHTING SCHEDULES.

14       A. We are proposing to combine Open Flame Gas Lanterns, Rate 115, and Outdoor  
15       Lighting Service, Rate 120, into one rate, Unmetered Lighting Service, Rate 115. As  
16       set forth on Paton Exhibit 4, we have changed the Tariff to reflect the formula that is  
17       applied to determine the appropriate monthly consumption for billing purposes instead  
18       of listing the monthly consumption for each lighting device.

19       Q. PLEASE DISCUSS THE NEW PROPOSED RATE 165, SPECIAL  
20       TRANSPORTATION RATE.

21       A. This service was established in our last general rate case, Docket No. G-5, Sub 481. In  
22       that proceeding we modified Rate 160, Special Service Rate that was available to

1 customers on sales Rate 150, to make it available to customers on transportation Rate  
2 180 also. We are recommending that a separate rate schedule, Rate 165, be established  
3 for ease of rate administration and reporting purposes. Rate 160 will be renamed  
4 Special Sales Rate.

5 Q. IS PSNC ENERGY PROPOSING CHANGES TO ANY OTHER RATE  
6 SCHEDULES?

7 A. We are proposing to change the annual term for which our industrial sales and  
8 transportation customers may elect service. Currently the annual term runs from June  
9 1<sup>st</sup> through May 31<sup>st</sup> with an election date of March 1<sup>st</sup>. We are proposing to change the  
10 election date to June 1<sup>st</sup> and the term to run from September 1<sup>st</sup> through August 31<sup>st</sup> in  
11 order to have any switch between sales and transportation service coincide with any  
12 changes that may result from the annual review of customer consumption required by  
13 Commission Rule R6-12(7).

14 Q. DO YOU BELIEVE THAT THE PROPOSED RATES IN THIS PROCEEDING ARE  
15 FAIR AND EQUITABLE FOR ALL CLASSES OF SERVICE?

16 A. Yes, I do.

17 Q. HAVE YOU PROVIDED EXHIBITS REFLECTING THESE PROPOSED RATE  
18 CHANGES?

19 A. Yes. Our current rates and charges are set forth on Paton Exhibit 1. Paton Exhibit 2  
20 shows our proposed rates and charges and the design of the proposed rates is set forth  
21 on Paton Exhibit 3. Proposed Tariff changes are set forth in Paton Exhibit 4.

22 Q. PLEASE DISCUSS THE COMPANY'S PROPOSED RESIDENTIAL AND SGS



1 HIGH-EFFICIENCY RATES.

2 A. We are proposing to offer discounted rates to residential customers whose homes have  
3 received the Department of Energy/Environmental Protection Agency's Energy Star  
4 Labeled Home Certification. For SGS customers to qualify for a discounted rate, their  
5 facilities must have received the Leadership in Energy and Environmental Design  
6 ("LEED") certification of the U.S. Green Building Council.

7 The new residential rate will be Rate 102, High-Efficiency Residential Service.  
8 The new SGS rate will be Rate 127, High-Efficiency Small General Service.

9 We are proposing to discount the fixed gas cost components of Rates 101 and 125  
10 to determine the rates applicable to Rates 102 and 127. The fixed gas cost component  
11 of Rate 102 will be discounted \$0.05 per therm from the summer and winter rates for  
12 Rate 101. For Rate 127, we propose to discount the fixed gas cost component of steps  
13 1 and 2 of Rate 125 by \$0.05 per therm.

14 Q. IS THE COMPANY PROPOSING ANY CHANGES TO ITS SERVICE RULES AND  
15 REGULATIONS?

16 A. No, we are not.

17 Q. DOES THE COMPANY PROPOSE CHANGES TO THE TRANSPORTATION  
18POOLING AGREEMENT?

19 A. Yes. We are proposing an addition to Article VII, Full Requirements Service, to clarify  
20 how an imbalance resulting from an adjustment to actual consumption or deliveries due  
21 to meter inaccuracy, billing error or otherwise, will be cashed out after the month in  
22 which such imbalance occurred.

1 Q. DOES THE COMPANY PROPOSE CHANGES TO THE VARIOUS RIDERS  
2 APPLICABLE TO THE COMPANY'S RATES?

3 A. Yes. We are proposing to add a provision to Rider A, Curtailment of Service Under  
4 Commission Rule R6-19.2, that sets forth the formula to be used to determine the price  
5 of any Emergency or Unauthorized gas sold pursuant to this Rider. This will ensure  
6 that a customer receiving gas under this rider pays any additional cost incurred by the  
7 Company to provide the gas.

8 We are proposing to eliminate Rider B that provides for a Special Fuels Tax  
9 applicable to Compressed Natural Gas and instead are proposing to add the following  
10 statement to the affected rate schedule, Rate 125: "The rates shown on the Summary of  
11 Rates and Charges for this Rate Schedule do not include applicable federal, state, or  
12 local highway motor fuel use taxes. Where applicable, bills rendered under this Rate  
13 Schedule will include such taxes."

14 Q. ARE THERE OTHER PROPOSED CHANGES TO THE COMPANY'S VARIOUS  
15 RATE RIDERS?

16 A. Yes. In conjunction with the Company's request to implement a Customer Usage  
17 Tracker as Rider C to the Company's Tariff, we are proposing to eliminate Rider E, the  
18 Weather Normalization Adjustment ("WNA"). The CUT is more fully discussed in the  
19 testimony of Dr. Wright. I will discuss the implementation and administration of the  
20 rate adjustment mechanism.

21 Q. PLEASE PROCEED.

22 A. The proposed formula to use in determining CUT adjustments is set forth on Rider C

1 which is included in Paton Exhibit 4. As set forth on Page 3 of Paton Exhibit 9, the  
2 Company will calculate monthly, based on the actual number of residential and SGS  
3 customers being billed, the normalized margin revenue that should have been recovered  
4 from these customers and will compare that amount to the actual amount of margin  
5 revenue recovered. The difference in these amounts will be recorded in the Customer  
6 Usage Deferred Account. The Company proposes to implement adjustments under the  
7 CUT twice a year in April and October. These adjustments will be based on the  
8 balance in the Customer Usage Deferred Account at the end of January and July,  
9 respectively.

10 Q. YOU STATED THAT IN CONJUNCTION WITH THE REQUEST FOR A CUT  
11 MECHANISM THE COMPANY IS PROPOSING TO ELIMINATE THE WNA.  
12 PLEASE ELABORATE.

13 A. As shown on Paton Exhibit 9, the components to be used to determine rate adjustments  
14 under the CUT are the same as those used in the Company's existing WNA. Because  
15 the proposed CUT mechanism will account for all variances in consumption, including  
16 those related to weather, we will no longer need the separate WNA mechanism.  
17 However, if the Commission were to decide in this proceeding that a CUT mechanism  
18 should not be implemented then the Company requests to maintain the WNA  
19 mechanism based on the factors set forth on Paton Exhibit 9.

20 Q. PLEASE DISCUSS THE COMPANY'S PROPOSAL REGARDING THE  
21 RECOVERY OF CONSERVATION AND EFFICIENCY PROGRAM EXPENSES.

22 A. As discussed in Dr. Wright's testimony, PSNC Energy is proposing four initiatives

1 regarding conservation:

- 2 • Communications program
- 3 • In-home energy audit program
- 4 • Energy-efficient equipment rebate program
- 5 • High-efficiency rates

6 Because the three programs have not been approved, the Company has not included the  
7 associated expenses in the cost of service in this proceeding. As discussed previously  
8 in my testimony, we are proposing to discount the fixed gas cost components of Rates  
9 101 and 125 to determine the rates applicable to Rates 102 and 127. Therefore, the  
10 “cost” of the discounts will be recovered through the normal fixed gas cost true-up  
11 procedure.

12 For the other three initiatives, as outlined in Dr. Wright’s testimony, the Company  
13 proposes to defer, track and true-up actual program expenses. After approval and  
14 implementation of these programs the Company proposes to record related expenses in  
15 a separate account. If applicable, separate accounts for residential and commercial  
16 programs will be maintained. Twice a year, at the same time that the Company files for  
17 a rate adjustment pursuant to the CUT, the Company will file for recovery of incurred  
18 program costs. A proposed reporting format for the deferral and recovery of these  
19 expenses is set forth in Paton Exhibit 13.

20 Q. PLEASE DISCUSS THE COMPANY’S PROPOSED RECOVERY OF THE  
21 DEFERRED RESIDENTIAL RATE DIFFERENTIAL FROM DOCKET NO. G-5,  
22 SUB 481.

1 A. In its Order on Reconsideration Amending Order and Scheduling New Hearing, the  
2 Commission ordered PSNC Energy to create a separate deferred account as of June 1,  
3 2007, and to record therein the per-therm rate differentials between Rate 110 and Rate  
4 105 for a period no longer than November 1, 2007, and to accrue interest at the  
5 Company's net-of-tax overall rate of return.

6 Q. HAVE YOU PREPARED A SCHEDULE SHOWING THE MONTHLY AMOUNTS  
7 DEFERRED AND THE BALANCE IN THE DEFERRED ACCOUNT?

8 A. Yes, this information is set forth on Paton Exhibit 14. Because rates set in this  
9 proceeding will not go into effect until November 1, 2008, the projected balance as of  
10 October 31, 2008 was used to determine the proposed increment. As shown on Paton  
11 Exhibit 14 the proposed increment is \$0.00136 per therm.

12 Q. DOES THIS COMPLETE YOUR PREFILED DIRECT TESTIMONY?

13 A. Yes, although I reserve the right to supplement or amend my testimony before or during  
14 the Commission's hearing on this Application.

**CANDACE A. PATON  
QUALIFICATIONS & EXPERIENCE**

**EDUCATION:**

1979                      Bachelor of Arts in Accounting  
North Carolina State University

**PROFESSIONAL LICENSURE:**

1983                      Certified Public Accountant, State of North Carolina

**MEMBER:**              American Institute of Certified Public Accountants  
North Carolina Association of Certified Public Accountants

**PROFESSIONAL UTILITY REGULATORY EXPERIENCE:**

August 2002 to Present	Rates & Regulatory Manager, PSNC Energy <i>Presented testimony before the NCUC in annual prudence reviews and Expansion Fund Project filing</i>
July 2001 to August 2002	Independent Consultant
April 1999 to March 2001	Supervisor, Regulatory Accounting Carolina Power & Light Company
January 1991 to April 1999	Manager, Regulatory Accounting Duke Power Company <i>Presented testimony before the NCUC in various fuel clause proceedings and an Integrated Resource Planning proceeding</i>
August 1987 to December 1990	Project Manager & Manager, Revenue Requirements Potomac Electric Power Company
January 1987 to August 1987 and October 1979 to July 1985	Public Staff of the North Carolina Utilities Commission Public Utilities Accountant II <i>Presented testimony before the NCUC in various telephone, electric and water &amp; sewer general rate case proceedings</i>
April 1986 to December 1986	Texas Office of Public Utility Counsel Chief Accountant <i>Presented testimony before the Texas Public Utility Commission in telephone &amp; electric rate case proceedings</i>
July 1985 to March 1986	Telecommunications Specialist North Carolina Utilities Commission

**FILED**  
**MAR 31 2008**  
Clerk's Office  
N.C. Utilities Commission

BEFORE THE  
  
NORTH CAROLINA UTILITIES COMMISSION  
  
PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 495

EXHIBITS  
  
TO ACCOMPANY THE DIRECT TESTIMONY  
  
OF  
  
CANDACE A. PATON

MARCH 31, 2008

Paton Exhibit 1	Present Rates & Charges
Paton Exhibit 2	Proposed Rates & Charges
Paton Exhibit 3	Proposed Rate Design
Paton Exhibit 4	Proposed Tariff (Rate Schedules & Riders)
Paton Exhibit 5	Per Books Cost of Service Study
Paton Exhibit 6	Adjusted Cost of Service Study Under Present Rates
Paton Exhibit 7	Adjusted Cost of Service Study Under Proposed Rates
Paton Exhibit 8	Summary of Adjusted Test Year Revenue
Paton Exhibit 9	Customer Usage Tracker Adjustment Mechanism
Paton Exhibit 10	Pro-Forma Cost of Gas
Paton Exhibit 11	Proposed Fixed Gas Cost Rates
Paton Exhibit 12	Proposed Company Use and Lost and Unaccounted For Rates
Paton Exhibit 13	Proposed Reporting Format for Deferred Conservation and Efficiency Program Expenditures
Paton Exhibit 14	Residential Rate Differential Deferral Temporary Increment



**PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.**  
**DOCKET NO. G-5, SUB 495**  
**PRESENT RATES & CHARGES**

Rate No.	Description	Facilities Charge	Billing Rate	All Customers Decrement	Adjusted Tariff Rate (a)
<b>101</b>	<b>Residential Service</b>				
	Facilities Charge - Per Month	\$10.00			
	Energy Charge - Per Therm				
	Winter - November through April		\$1.34321	\$0.02916	\$1.37237
	Summer- May through October		\$1.29486	\$0.01751	\$1.31237
<b>115</b>	<b>Open Flame Gas Lanterns</b>				
	Facilities Charge - Per Month	\$10.00			
	Energy Charge - Per Therm				
	Winter - November through April		\$1.34321	\$0.02916	\$1.37237
	Summer- May through October		\$1.29486	\$0.01751	\$1.31237
<b>120</b>	<b>Outdoor Lighting Service</b>				
	Single upright mantle - Per Month	\$10.16			
	Double inverted mantle - Per Month	\$10.16			
	Add'l inverted mantle - Per Month	\$5.08			
	Add'l upright mantle - Per Month	\$9.68			
<b>125</b>	<b>Small General Service</b>				
	Facilities Charge - Per Month	\$17.50			
	Energy Charge - Per Therm				
	First 500		\$1.25032	\$0.02346	\$1.27378
	Next 4,500		\$1.18032	\$0.02346	\$1.20378
	All Over 5,000		\$1.13032	\$0.02346	\$1.15378
<b>126</b>	<b>Small General Service - Cooling</b>				
	Facilities Charge - Per Month	\$30.00			
	Energy Charge - Per Therm		\$1.13709	\$0.02346	\$1.16055
<b>145</b>	<b>Large-Quantity General Service</b>				
	Facilities Charge - Per Month	\$300.00			
	Energy Charge - Per Therm				
	First 15,000		\$1.05705	\$0.01125	\$1.06830
	Next 15,000		\$1.03805	\$0.01125	\$1.04930
	Next 15,000		\$1.01905	\$0.01125	\$1.03030
	Next 15,000		\$0.99353	\$0.01125	\$1.00478
	All Over 60,000		\$0.97253	\$0.01125	\$0.98378
<b>150</b>	<b>Large-Quantity Interruptible Commercial &amp; Industrial Service</b>				
	Facilities Charge - Per Month	\$600.00			
	Energy Charge - Per Therm				
	First 15,000		\$0.99779	\$0.00699	\$1.00478
	Next 15,000		\$0.97679	\$0.00699	\$0.98378
	Next 70,000		\$0.95579	\$0.00699	\$0.96278
	Next 500,000		\$0.93479	\$0.00699	\$0.94178
	All Over 600,000		\$0.91379	\$0.00699	\$0.92078
<b>160</b>	<b>Special Service Rate</b>				
	Facilities Charge - Per Month	\$600.00			
	Energy Charge - Per Therm		See Sheet No. 160		

**PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.**  
**DOCKET NO. G-5, SUB 495**  
**PRESENT RATES & CHARGES**

Rate No.	Description	Facilities Charge	Billing Rate	All Customers Decrement	Adjusted Tariff Rate
					(a)
<b>175</b>	<b>Firm Transportation Service For Customers Qualifying For Service On Rate Schedule No. 145</b>				
	Facilities Charge - Per Month (b)	\$300.00			
	Energy Charge - Per Therm				
	First 15,000		\$0.15357	\$0.00440	\$0.15797
	Next 15,000		\$0.13457	\$0.00440	\$0.13897
	Next 15,000		\$0.11557	\$0.00440	\$0.11997
	Next 15,000		\$0.09005	\$0.00440	\$0.09445
	All Over 60,000		\$0.06905	\$0.00440	\$0.07345
<b>180</b>	<b>Interruptible Transportation Service For Customers Qualifying For Service on Rate Schedule No. 150</b>				
	Facilities Charge - Per Month (b)	\$600.00			
	Energy Charge - Per Therm				
	First 15,000		\$0.10670	\$0.00311	\$0.10981
	Next 15,000		\$0.08570	\$0.00311	\$0.08881
	Next 70,000		\$0.06470	\$0.00311	\$0.06781
	Next 500,000		\$0.04370	\$0.00311	\$0.04681
	All Over 600,000		\$0.02270	\$0.00311	\$0.02581
<b>195</b>	<b>Natural Gas Vehicle Developmental Rate</b>				
	Facilities Charge - Per Month	\$60.00			
	Energy Charge - Per Therm (c)		\$0.87600		\$0.87600
	<b>Rider A - Emergency Services</b>				
	Energy Charge - Per Therm				
	Limited Emergency Service		\$1.55055		
	On-Peak Emergency Service		\$1.85055		
	Unauthorized Gas		\$10.00000		
	<b>Miscellaneous Fees</b>				
	Returned Checks and Bank Drafts	\$25.00			
	Reconnection (d)				
	Residential - Regular Hours	\$65.00			
	After 5 p.m., weekends, holidays	\$95.00			
	Non-Residential - Regular Hours	\$95.00			
	After 5 p.m., weekends, holidays	\$125.00			

- (a) State Excise Tax applies to all natural gas deliveries
- (b) The Facilities Charge is the Facilities Charge applicable to the Large-Quantity Rate Schedule under which the customer is entitled to receive sales service.
- (c) Rate adjustment procedures stated in PSNC's Rider D relating to commodity and other charges shall not apply to this rate. The rate is subject to adjustment, with the approval of the North Carolina Utilities Commission, so that it will exceed the benchmark commodity gas cost at all times.
- (d) All reconnections that exceed one hour shall be billed the indicated rates per hour.

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
DOCKET NO. G-5, SUB 495  
PROPOSED RATES & CHARGES

Rate No.	Description	Facilities Charge	Billing Rate
101	<b>Residential Service</b>		
	Facilities Charge - Per Month	\$12.00	
	Energy Charge - Per Therm		
	Winter - November through April		\$1.39011
	Summer- May through October		\$1.33011
102	<b>High-Efficiency Residential Service</b>		
	Facilities Charge - Per Month	\$12.00	
	Energy Charge - Per Therm		
	Winter - November through April		\$1.34011
	Summer- May through October		\$1.28011
115	<b>Unmetered Lighting Service</b>		
	Facilities Charge - Per Month	\$12.00	
	Energy Charge - Per Therm		
	Winter - November through April		\$1.39011
	Summer- May through October		\$1.33011
125	<b>Small General Service</b>		
	Facilities Charge - Per Month	\$20.00	
	Energy Charge - Per Therm		
	First 500		\$1.29230
	Next 4,500		\$1.22230
	All Over 5,000		\$1.17230
126	<b>Small General Service - Cooling</b>		
	Facilities Charge - Per Month	\$30.00	
	Energy Charge - Per Therm		\$1.17230
127	<b>High-Efficiency Small General Service</b>		
	Facilities Charge - Per Month	\$20.00	
	Energy Charge - Per Therm		
	First 500		\$1.24230
	Next 4,500		\$1.17230
	All Over 5,000		\$1.17230
145	<b>Large-Quantity General Service</b>		
	Facilities Charge - Per Month	\$300.00	
	Energy Charge - Per Therm		
	First 15,000		\$1.07817
	Next 15,000		\$1.05917
	Next 15,000		\$1.04017
	Next 15,000		\$1.01465
	All Over 60,000		\$0.99365
150	<b>Large-Quantity Interruptible Commercial &amp; Industrial Service</b>		
	Facilities Charge - Per Month	\$600.00	
	Energy Charge - Per Therm		
	First 15,000		\$1.00875
	Next 15,000		\$0.98775
	Next 70,000		\$0.96675
	Next 500,000		\$0.94575
	All Over 600,000		\$0.92475

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
DOCKET NO. G-5, SUB 495  
PROPOSED RATES & CHARGES

Rate No.	Description	Facilities Charge	Billing Rate
160	<b>Special Sales Rate</b>		
	Facilities Charge - Per Month	\$600.00	
	Energy Charge - Per Therm		See Sheet No. 160
165	<b>Special Transportation Rate</b>		
	Facilities Charge - Per Month	\$600.00	
	Energy Charge - Per Therm		See Sheet No. 165
175	<b>Firm Transportation Service For Customers Qualifying For Service On Rate Schedule No. 145</b>		
	Facilities Charge - Per Month	\$300.00	
	Energy Charge - Per Therm		
	First 15,000		\$0.16131
	Next 15,000		\$0.14231
	Next 15,000		\$0.12331
	Next 15,000		\$0.09779
	All Over 60,000		\$0.07679
180	<b>Interruptible Transportation For Customers Qualifying For Service on Rate Schedule No. 150</b>		
	Facilities Charge - Per Month	\$600.00	
	Energy Charge - Per Therm		
	First 15,000		\$0.11586
	Next 15,000		\$0.09486
	Next 70,000		\$0.07386
	Next 500,000		\$0.05286
	All Over 600,000		\$0.03186
	<b>Rider A - Emergency Services</b>		
	Energy Charge - Per Therm		
	Limited Emergency Service		\$1.000 plus cost of Gas
	On-Peak Emergency Service		\$1.500 plus cost of Gas
	Unauthorized Gas		\$2.500 plus cost of Gas
	<b>Miscellaneous Fees</b>		
	Returned Checks and Bank Drafts	\$25.00	
	Reconnection (b)		
	Residential - Regular Hours	\$65.00	
	After 5 p.m., weekends, holidays	\$95.00	
	Non-Residential - Regular Hours	\$95.00	
	After 5 p.m., weekends, holidays	\$125.00	

- (a) Rates do not include applicable excise taxes.  
(b) All reconnections that exceed one hour shall be billed the indicated rates per hour.

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
DOCKET NO. G-5, SUB 495  
PROPOSED RATE DESIGN

Paton Exhibit 3

Rate	Block	Bills	Therms	Proposed Facilities Charge	Proposed Energy Charge	Facilities Charge Revenue	Energy Charge Revenue	Total Revenue	Present Rates	Change	% Change
<b>101 - Residential Service</b>											
Summer Energy Charge - Per Therm	All	2,512,314	40,727,711	\$12.00	\$1.33011	\$30,147,768	\$54,172,336	\$84,320,104			
Winter Energy Charge - Per Therm	All	2,550,358	238,938,208	\$12.00	\$1.39011	\$30,604,296	\$332,150,392	\$362,754,688			
	Total		<u>279,665,919</u>					<u>\$447,074,792</u>	<u>\$431,988,175</u>	<u>\$15,086,617</u>	<u>3.49%</u>
<b>115 - Unmetered Lighting Service</b>											
Summer Energy Charge - Per Therm	All	531	24,706	\$12.00	\$1.33011	\$6,372	\$32,862	\$39,234			
Winter Energy Charge - Per Therm	All	528	23,558	\$12.00	\$1.39011	\$6,336	\$32,748	\$39,084			
	Total		<u>48,264</u>					<u>\$78,318</u>	<u>\$51,821</u>	<u>\$26,497</u>	<u>51.13%</u>
<b>125 - Small General Service</b>											
Energy Charge - Per Therm	First 500	470,917	70,068,860	\$20.00	\$1.29230	\$9,418,340	\$90,549,988	\$99,968,328			
	Next 4,500		61,428,833		\$1.22230		\$75,084,463	\$75,084,463			
	All Over 5,000		3,558,792		\$1.17230		\$4,169,627	\$4,169,627			
	Total		<u>135,054,485</u>				<u>\$179,222,418</u>	<u>\$175,543,916</u>	<u>\$3,678,502</u>	<u>2.10%</u>	
<b>126 - Small General Service - Cooling</b>											
Energy Charge - Per Therm	All	90	86,981	\$30.00	\$1.17230	\$2,700	\$101,968	\$104,668	\$103,646	\$1,022	0.99%
<b>145 - Large-Quantity General Service</b>											
Energy Charge - Per Therm	First 15,000	2,620	18,704,462	\$300.00	\$1.07817	\$786,000	\$20,166,590	\$20,952,590			
	Next 15,000		1,822,188		\$1.05917		\$1,930,007	\$1,930,007			
	Next 15,000		449,953		\$1.04017		\$468,028	\$468,028			
	Next 15,000		236,135		\$1.01465		\$239,595	\$239,595			
	All Over 60,000		219,980		\$0.99365		\$218,564	\$218,564			
	Total		<u>21,432,699</u>				<u>\$23,808,783</u>	<u>\$23,597,242</u>	<u>\$211,541</u>	<u>0.90%</u>	
<b>150 - Large-Quantity Interruptible Commercial &amp; Industrial Service</b>											
Energy Charge - Per Therm	First 15,000	280	3,208,390	\$600.00	\$1.00875	\$168,000	\$3,236,463	\$3,404,463			
	Next 15,000		2,828,622		\$0.98775		\$2,596,422	\$2,596,422			
	Next 70,000		7,409,387		\$0.96675		\$7,163,025	\$7,163,025			
	Next 500,000		14,512,402		\$0.94575		\$13,725,104	\$13,725,104			
	All Over 600,000		1,384,885		\$0.92475		\$1,280,673	\$1,280,673			
	Total		<u>26,743,686</u>				<u>\$28,169,686</u>	<u>\$28,053,986</u>	<u>\$115,700</u>	<u>0.41%</u>	
<b>160 - Special Sales Rate</b>											
Energy Charge - Per Therm	All	(a)		\$600.00	Negotiated						
<b>165 - Special Transportation Rate</b>											
Energy Charge - Per Therm	All	(b)		\$600.00	Negotiated						
<b>175 - Firm Transportation Service For Customers Qualifying For Service On Rate Schedule No. 145</b>											
Energy Charge - Per Therm	First 15,000	2,810	33,396,636	\$300.00	\$0.16131	\$843,000	\$5,387,211	\$6,230,211			
	Next 15,000		15,547,405		\$0.14231		\$2,212,551	\$2,212,551			
	Next 15,000		8,108,516		\$0.12331		\$999,861	\$999,861			
	Next 15,000		4,818,930		\$0.09779		\$471,243	\$471,243			
	All Over 60,000		10,216,709		\$0.07679		\$784,541	\$784,541			
	Total		<u>72,088,196</u>				<u>\$10,698,408</u>	<u>\$10,457,633</u>	<u>\$240,775</u>	<u>2.30%</u>	
<b>180 - Interruptible Transportation Service For Customers Qualifying For Service On Rate Schedule No. 150</b>											
Energy Charge - Per Therm	First 15,000	2,073	28,770,710	\$600.00	\$0.11586	\$1,243,800	\$3,333,374	\$4,577,174			
	Next 15,000		23,669,279		\$0.09486		\$2,245,268	\$2,245,268			
	Next 70,000		60,647,872		\$0.07386		\$4,479,452	\$4,479,452			
	Next 500,000		59,842,566		\$0.06286		\$3,163,278	\$3,163,278			
	All Over 600,000		5,467,467		\$0.03186		\$174,194	\$174,194			
	Total		<u>178,397,895</u>				<u>\$14,639,366</u>	<u>\$13,560,237</u>	<u>\$1,079,129</u>	<u>7.96%</u>	
<b>Total Rate Schedule Revenue</b>								<u>\$703,796,438</u>	<u>\$683,356,856</u>	<u>\$20,439,582</u>	
<b>Rounding</b>								<u>\$1,717</u>		<u>\$1,717</u>	
<b>Special Contract Revenue</b>								<u>\$818,496</u>	<u>\$818,496</u>	<u>\$0</u>	
<b>Total Revenues</b>								<u>\$704,416,651</u>	<u>\$683,975,151</u>	<u>\$20,441,499</u>	<u>2.99%</u>

PUBLIC SERVICE COMPANY OF N.C., INC.  
N.C.U.C. TARIFF

## Summary of Rates and Charges

Page 1 of 2 Sheet No. 100-4

<u>Summary of Rates and Charges Applicable to Rate Schedules in N.C.U.C. Tariff</u>			
<u>RATE SCHEDULE NO. AND DESCRIPTION</u>		<u>CHARGES (a)</u>	
101 -	<b>RESIDENTIAL SERVICE</b>		
	Facilities Charge	\$40.0012.00	per month
	Summer Energy Charge – May through October	\$1.294861.33011	per therm
	Winter Energy Charge – November through April	\$1.343241.39011	per therm
102-	<b>HIGH-EFFICIENCY RESIDENTIAL SERVICE</b>		
	Facilities Charge	\$12.00	per month
	Summer Energy Charge – May through October	\$1.28011	per therm
	Winter Energy Charge – November through April	\$1.34011	per therm
115 -	<b>OPEN-FLAME GAS LANTERNSUNMETERED LIGHTING SERVICE</b>		
	Facilities Charge	\$40.00	per month
	Summer Energy Charge – May through October	\$1.294861.33011	per therm
	Winter Energy Charge – November through April	\$1.343241.39011	per therm
120-	<b>UNMETERED OUTDOOR LIGHTING SERVICE</b>		
	— Single Upright Mantle	\$10.16	per month
	— Double Inverted Mantle	\$10.16	per month
	Each Additional Mantle:		
	— Inverted type up to 1,250 BTU/hr.	\$5.08	per month
	— Upright type up to 2,500 BTU/hr.	\$9.68	per month
125 -	<b>SMALL GENERAL SERVICE</b>		
	Facilities Charge	\$47.5020.00	per month
	Energy Charge First 500	\$1.250321.29230	per therm
	Next 4,500	\$1.180321.22230	per therm
	All Over 5,000	\$1.130321.17230	per therm
126 -	<b>SMALL GENERAL SERVICE - COOLING</b>		
	Facilities Charge	\$30.00	per month
	Energy Charge	\$1.137091.17230	per therm
127 -	<b>HIGH-EFFICIENCY SMALL GENERAL SERVICE</b>		
	Facilities Charge	\$20.00	per month
	Energy Charge First 500	\$1.24230	per therm
	Next 4,500	\$1.17230	per therm
	All Over 5,000	\$1.17230	per therm
145 -	<b>LARGE-QUANTITY GENERAL SERVICE</b>		
	Facilities Charge	\$300.00	per month
	Energy Charge First 15,000	\$1.057051.07817	per therm
	Next 15,000	\$1.038051.05917	per therm
	Next 15,000	\$1.019051.04017	per therm
	Next 15,000	\$0.993531.01465	per therm
	All Over 60,000	\$0.972530.99365	per therm
150 -	<b>LARGE-QUANTITY INTERRUPTIBLE COMMERCIAL AND INDUSTRIAL SERVICE</b>		
	Facilities Charge	\$600.00	per month
	Energy Charge First 15,000	\$0.997791.00875	per therm
	Next 15,000	\$0.976790.98775	per therm
	Next 70,000	\$0.955790.96675	per therm
	Next 500,000	\$0.934790.94575	per therm
	All Over 600,000	\$0.913790.92475	per therm

Issued by D. Russell Harris, President and Chief Operating Officer

Issued on October 29, 2007 November 1, 2008

Issued under North Carolina Utilities Commission Docket No. G-5, Sub 481495

Effective November 1, 20072008

160 -	<b>SPECIAL SERVICE RATE</b>	
	Facilities Charge (b)	\$600.00 per month
	Energy Charge	See <del>Sheet</del> <u>Rate Schedule</u> No. 160

PUBLIC SERVICE COMPANY OF N. C., INC.  
N.C.U.C. TARIFF

Summary of Rates and Charges  
Sheet No. 100-2 Page 2 of 2

<u>Summary of Rates and Charges Applicable to Rate Schedules in N.C.U.C. Tariff</u>			
<u>RATE SCHEDULE NO. AND DESCRIPTION</u>		<u>CHARGES (a)</u>	
165-	<b><u>SPECIAL TRANSPORTATION RATE</u></b>		
	Facilities Charge	\$600.00	per month
	Energy Charge	See Rate Schedule No. 165	
175-	<b>FIRM TRANSPORTATION SERVICE CUSTOMERS QUALIFYING FOR SERVICE ON RATE SCHEDULE NO. 145</b>		
	Facilities Charge (b)	\$300.00	per month
	Transportation Charge First 15,000	\$0.153570.16131	per therm
	Next 15,000	\$0.134570.14231	per therm
	Next 15,000	\$0.115570.12331	per therm
	Next 15,000	\$0.090050.09779	per therm
	All Over 60,000	\$0.069050.07679	per therm
180-	<b>INTERRUPTIBLE TRANSPORTATION SERVICE FOR CUSTOMERS QUALIFYING FOR SERVICE ON RATE SCHEDULE NO. 150</b>		
	Facilities Charge (b)	\$600.00	per month
	Transportation Charge First 15,000	\$0.106700.11586	per therm
	Next 15,000	\$0.085700.09486	per therm
	Next 70,000	\$0.064700.07386	per therm
	Next 500,000	\$0.043700.05286	per therm
	All Over 600,000	\$0.022700.03186	per therm
195-	<b><u>NATURAL GAS VEHICLE DEVELOPMENTAL RATE</u></b>		
	Facilities Charge	\$60.00	per month
	Energy Charge	\$0.87600 (c)	per therm
Rider A -	<b>EMERGENCY SERVICES</b>		
	Limited Emergency Service	\$1.550551.00 plus cost of Gas	per therm
	On-Peak Emergency Service	\$1.850551.50 plus cost of Gas	per therm
	Unauthorized Gas	\$10.000002.50 plus cost of Gas	per therm
<b><u>MISCELLANEOUS FEE SCHEDULE</u></b>			
	<b>RETURNED CHECKS AND BANK DRAFTS</b>	\$25.00	
	<b>RECONNECTION (db)</b>		
	Residential - Regular Hours	\$65.00	
	--After 5 p.m., weekends, holidays	\$95.00	
	Non-Residential - Regular Hours	\$95.00	
	--After 5 p.m., weekends, holidays	\$125.00	
(a)	<del>State Excise Tax applies to all natural gas deliveries. Rates do not include applicable excise taxes.</del>		
(b)	<del>The Facilities Charge is the Facilities Charge applicable to the Large Quantity Rate Schedule under which the Customer is entitled to receive sales Service.</del>		
(c)	<del>Rate adjustment procedures stated in PSNC's Rider D shall not apply to this rate. The rate is subject to adjustment, with the approval of the North Carolina Utilities Commission, so that it will exceed the benchmark commodity gas cost at all times.</del>		
(db)	All reconstructions that exceed one hour shall be billed the indicated rates per hour.		

Issued by D. Russell Harris, President and Chief Operating Officer  
Issued on, ~~October 29, 2007~~ November 1, 2008  
Issued under North Carolina Utilities Commission Docket No. G-5, Sub 484 495

Effective November 1, 20072008



RATE SCHEDULE NO. 101

RESIDENTIAL SERVICE

This Rate Schedule is available to residential Customers. Family care homes as defined in G.S. 168-21 may elect Service under this ~~schedule~~ Rate Schedule. Separate Meters, separate Accounts, and separate locations may not be combined for billing under this ~~schedule~~ Rate Schedule.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective ~~Sheet No. 100-1~~ Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Bills under this Rate Schedule are subject to a ~~Weather Normalization Adjustment~~ the Customer Usage Tracker procedure as set forth under Rider E-C of this Tariff.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 25 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.

The charges above are set forth in the currently effective ~~Sheet No. 100-2~~ Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this ~~schedule~~ Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC ~~and or~~ Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing ~~Gas Service~~ in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

## RATE SCHEDULE NO. 102

HIGH-EFFICIENCY RESIDENTIAL SERVICE

This Rate Schedule is available to a residential Customer who qualifies for Service on Rate Schedule No. 101 and whose residence is certified to meet the standards of the Energy Star program of the U.S. Department of Energy and U.S. Environmental Protection Agency. Separate Meters, separate Accounts, and separate locations may not be combined for billing under this Rate Schedule.

Service under this Rate Schedule will begin after Customer has provided PSNC with certification that Customer's residence meets the Energy Star standards and will continue to be available at such residence provided the residence and any modifications thereto continue to meet the Energy Star standards. PSNC shall have the right to inspect Customer's Premises for compliance with these requirements.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Bills under this Rate Schedule are subject to the Customer Usage Tracker procedure set forth under Rider C of this Tariff.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 25 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 115

OPEN FLAME GAS LANTERNS UNMETERED LIGHTING SERVICE

This Rate Schedule is available for Customer owned, unmetered, open flame gas lighting Service, located wherever Gas is available within the certificated Service territory of PSNC. All Gas delivered is for use exclusively in permanently installed Gas lanterns lighting devices, including Gas lanterns, connected to PSNC's distribution system. ~~Lanterns rated by the manufacturer at 3,451 BTU per hour will be billed a monthly consumption of 25.21 therms. Lanterns rated by the manufacturer at 4,854 BTU per hour will be billed a monthly consumption of 35.46 therms. Lanterns rated by the manufacturer at 1,800 BTU per hour will be billed a monthly consumption of 13.15 therms. Lanterns rated by the manufacturer at 2,125 BTU per hour will be billed a monthly consumption of 15.52 therms. Monthly consumption for billing under this Rate Schedule is determined based upon the manufacturer's BTU rating for each Gas lighting device according to the following formula:~~

$$\text{monthly consumption (Therms)} = \frac{\text{BTU rating (BTU/hour)} \times 24 \text{ hours/day} \times 365.25 \text{ days/year}}{12 \text{ months/year} \times 100,000 \text{ BTU/Therm}}$$

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Sheet No. ~~100-4~~ Summary of Rates and Charges of this Tariff and are incorporated herein by reference.

One Facilities Charge will be billed per account Account. However, if an existing Customer adds an Open Flame Gas Lantern lighting device at Premises currently receiving Service, no additional Facilities Charge will be billed beyond that currently billed under the Customer's currently applicable Tariff to Customer.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 25 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of the Customer at the same Premises within the past year.

The charges above are set forth in the currently effective Sheet No. ~~100-2~~ Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this ~~schedule~~ Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC and/or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Gas Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 120

UNMETERED OUTDOOR LIGHTING SERVICE

This Rate Schedule is available for Customer owned unmetered outdoor lighting Service located wherever Gas is available within the certificated Service territory of PSNC. All Gas delivered is for use exclusively in permanently installed Gas lighting devices having a manufacturer's hourly rated consumption of .025 therms per mantle or less, connected to PSNC's distribution system.

Rate

The applicable monthly charges are set forth in the currently effective Sheet No. 100-1 of this Tariff and are incorporated herein by reference.

The minimum monthly bill is the applicable amount stated on Sheet No. 100-1.

Payment of Bills

Bills are due and payable upon receipt and become past due 25 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.

The charges above are set forth in the currently effective Sheet No. 100-2 of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this schedule is subject to all lawful orders, rules and regulations of duly constituted governmental authorities having jurisdiction over either PSNC and Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm or corporation by reason of PSNC's curtailing Gas Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 125

SMALL GENERAL SERVICE

This Rate Schedule is available to commercial and small industrial Customers that are primarily engaged in the sale of goods or services, manufacturing, schools, institutions, and governmental agencies, including single-metered health care facilities. This Rate Schedule is available to master metered apartment buildings, but is not available to any individual Customer who qualifies for a Service under residential Rate Schedule No. 101. Family care homes as defined in G.S. 168-21 may elect Service under a residential Rate Schedule No. 101. Separate Meters, separate Accounts, and separate locations may not be combined for billing under this ~~schedule~~ Rate Schedule.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective ~~Sheet No. 100-1~~ Summary of Rates and Charges of this Tariff and are incorporated herein by reference. ~~Bills under this Rate Schedule are subject to a Weather Normalization Adjustment procedure as set forth under Rider E of this Tariff.~~

The rates shown on the Summary of Rates and Charges for this Rate Schedule do not include applicable federal, state, or local highway motor fuel use taxes. Where applicable, bills rendered under this Rate Schedule will include such taxes.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.

The charges above are set forth in the currently effective ~~Sheet No. 100-2~~ Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this ~~schedule~~ Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC ~~and or~~ Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing ~~Gas~~ Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 126  
SMALL GENERAL SERVICE - COOLING

This Rate Schedule is available to commercial and small industrial Customers that are primarily engaged in the sale of goods or services, manufacturing, schools, institutions, and governmental agencies, including single-metered health care facilities. This Rate Schedule is available to master metered apartment buildings, but is not available for the to any individual Customer who qualifies for a residential Service under Rate schedule Schedule No. 101. Family care homes as defined in G.S. 168-21 may elect Service under a residential Rate Schedule No. 101. This Rate Schedule is also available to Customers utilizing Gas-fired desiccant dehumidification systems or Gas-fired absorption or Gas engine-driven air conditioning units. Separate Meters, separate Accounts, and separate locations may not be combined for billing under this ~~schedule~~Rate Schedule.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Sheet No. 100-4 Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Bills under this Rate Schedule are subject to a Weather Normalization Adjustment the Customer Usage Tracker procedure as set forth under Rider E-C of this Tariff.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.

The charges above are set forth in the currently effective Sheet No. 100-2 Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this ~~schedule~~Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC and/or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customers or any other person, firm, or corporation by reason of PSNC's curtailing Gas Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 127HIGH-EFFICIENCY SMALL GENERAL SERVICE

This Rate Schedule is available to a commercial or small industrial Customer that qualifies for Service on Rate Schedule No. 125 and that occupies a building that is LEED-certified by the U.S. Green Building Council. Separate Meters, separate Accounts, and separate locations may not be combined for billing under this Rate Schedule.

Service under this Rate Schedule will begin after Customer has provided PSNC with the LEED certification for the building that Customer occupies and will continue to be available at such location provided the building and any modifications thereto continue to be LEED-certified. PSNC shall have the right to inspect Customer's Premises for compliance with these requirements.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

PUBLIC SERVICE COMPANY OF N.-C., INC.  
N.C.U.C. TARIFF

Rate Schedule No. 145  
Sheet No. 145 Page 1 of 1

## RATE SCHEDULE NO. 145

### LARGE-QUANTITY GENERAL SERVICE

This Rate Schedule is available to any large commercial and industrial Customer using in excess of 60,000 Therms per year, subject to an adequate supply of Gas and delivery capability at the location of the Customer's Premises.

Once a qualified Customer elects Service under this Rate Schedule, Service will be provided for a term extending through the following ~~May-August~~ 31; provided, however, that a new, qualifying Customer may change its election from this Rate Schedule 145 to Rate Schedule No. 175 one time during the initial twelve-month period of Service. Customer may elect to discontinue Service under this Rate Schedule and receive Service from Rate Schedule No. 175 by giving written notice to the Company ~~PSNC~~ prior to ~~March-June~~ 1 of any year. Proper notice having been provided, Customer shall discontinue Service under this Rate Schedule effective the first ~~June-September~~ 1 following the notice.

Customer may switch between this Rate Schedule and Rate Schedule No. 150 one time during any twelve-month period, provided that Customer qualifies for Service under Rate Schedule No. 150 before switching to Service under that Rate Schedule.

All Gas purchased under this Rate Schedule shall be separately measured from any Gas purchased or transported under any other Rate Schedule. Separate Meters, separate Accounts, and separate locations may not be combined in determining quantities for billing purposes. ~~A Customer shall not be permitted to switch between this Rate Schedule and Rate Schedule No. 150 more often than once in any 12-month period.~~

### Rate

The applicable monthly Facilities Charge and ~~the applicable Energy Charge for this Rate Schedule is~~ set forth in that ~~portion of the currently effective Sheet No. 100-1 Summary of Rates and Charges of this Tariff, and that portion of Sheet No. 100-1 is~~ incorporated herein by reference.

The minimum monthly bill is the Facilities Charge.

### Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks ~~or and~~ drafts returned to PSNC. Reconnection charges will be made to restore Service ~~which for:~~ (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.

The charges above are set forth in the currently effective ~~Sheet No. 100-2 Summary of Rates and Charges of this Tariff~~ under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

### Rules and Regulations

Service under this ~~schedule~~ Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC ~~and or~~ Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customers or any other person, firm, or corporation by reason of PSNC's curtailing Gas Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.



RATE SCHEDULE NO. 150

LARGE-QUANTITY INTERRUPTIBLE COMMERCIAL AND INDUSTRIAL SERVICE

This Rate Schedule is available to any large commercial and industrial Customer using in excess of 500 ~~therms~~ Therms per day on an annual basis, adjusted for curtailment, subject to an adequate supply of Gas and delivery capability at the location of the Customer's Premises.

Once a qualified Customer elects Service under this Rate Schedule, Service will be provided for a term extending through the following ~~May-August~~ 31; provided, however, that a new, qualifying Customer may change its election from this Rate Schedule 150 to Rate Schedule No. 180 one time during the initial twelve-month period of Service. Customer may elect to discontinue Service under this Rate Schedule and receive Service from Rate Schedule No. 180 by giving written notice to ~~the Company~~ PSNC prior to ~~March-June~~ 1 of any year. Proper notice having been provided, Customer shall discontinue Service under this Rate Schedule effective the first ~~June-September~~ 1 following the notice.

Customer may switch between this Rate Schedule and Rate Schedule No. 145 one time during any twelve-month period, provided that PSNC's consent is obtained before Customer may switch to Service under Rate Schedule No. 145. PSNC will grant such consent if it has, or is able to acquire under commercially reasonable terms and conditions, the necessary Gas supplies and capacity to provide Service to Customer under Rate Schedule No. 145.

All Gas purchased under this Rate Schedule shall be separately measured from any Gas purchased or transported under any other Rate Schedule. Separate Meters, separate Accounts, and separate locations may not be combined in determining quantities for billing. ~~A Customer shall not be permitted to switch between this schedule and Rate Schedule No. 145 more often than once in any 12-month period.~~

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge for this Rate Schedule ~~is are~~ set forth in ~~that portion of the currently effective Sheet No. 100-4 Summary of Rates and Charges of this Tariff; and that portion of Sheet No. 100-4 is are~~ incorporated herein by reference.

When Customer has the installed and operable capability to burn an alternate fuel and the equivalent alternate fuel cost is less than the ~~energy~~ Energy charge ~~Charge~~ under this Rate Schedule, Customer may be served under ~~PSNC's~~ Rate Schedule No. 160. In order to receive Service under Rate Schedule No. 160, Customer must maintain separately metered Accounts for each type of alternate fuel.

The minimum monthly bill is the Facilities Charge. The Facilities Charge will be waived in any month when PSNC is unable to deliver any Gas during that billing month. Service under this ~~Tariff~~ Rate Schedule is subject to ~~PSNC's~~ Rider A of this Tariff.

Curtailment

Customer must be capable of being 100% curtailed, other than ~~for an allowance of 10 therms~~ Therms per day for pilot usage, on two hours notice. In case of non-compliance with a curtailment order, PSNC shall have the right to valve off Service when necessary, in PSNC's sole opinion, to protect Service to higher margin Customers.

Unauthorized Gas

In the event a Customer fails to discontinue the use of Gas after two hours' notice that Gas under this ~~schedule~~ Rate Schedule is not available, all Gas so used shall be paid for by Customer at the rate for Unauthorized Gas set forth ~~under Rider A in Sheet No. 100-2 in the currently effective Summary of Rates and Charges of this Tariff~~ plus the cost of Gas used, as calculated under Rider A of this Tariff in addition to the regular energy charge for such Gas. In addition, Customer shall reimburse PSNC for any expenses caused by Customer's failure to discontinue use of Gas.

RATE SCHEDULE NO. 150 (Continued)

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.

The charges above are set forth in the currently effective ~~Sheet No. 100-2~~ Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this ~~schedule~~ Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC ~~and or~~ Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing ~~Gas~~ Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 160

SPECIAL SERVICE SALES RATE

This Rate Schedule is available to any Rate Schedule No. 150 or 180 Customer that has installed and operable alternate fuel capability on those occasions when PSNC has Gas that it can not sell or transportation Service available that it cannot ~~is not needed to provide pursuant to Service under~~ its other Rate Schedules containing fixed rates. PSNC may require Customer to demonstrate that its alternate fuel capability is able to operate prior to providing Service under this Rate Schedule. This Rate Schedule is designed to permit PSNC to sell such Gas or transportation Service. All sales under this Rate Schedule are provided only in accordance with PSNC's guidelines as may be revised from time to time.

All Gas or transportation Service purchased pursuant to under this Rate Schedule shall be measured separately from Gas purchased or transported under any of PSNC's other Rate Schedules. Service under this Rate Schedule is temporary and PSNC has the right to discontinue such Service on two hours' notice. Service under this Rate Schedule will be provided at PSNC's sole discretion.

In order to receive Service under this Rate No. 160 Schedule, Customer must maintain separately metered Accounts for each type of alternate fuel. On any given Account, all equipment must be able to accept 100% curtailment on two hours' notice and be capable of burning the same type of alternate fuel. Customer must be capable of being 100% curtailed on two hours' notice. In case of non-compliance with a curtailment order, PSNC shall have the right to valve off Service when it is necessary in PSNC's sole opinion to protect Service to higher margin Customers.

Rate

Customer shall pay PSNC for all Gas or transportation Service supplied provided under this Rate Schedule at a rate determined prior to delivery, plus the Facilities Charge which is set forth on Sheet No. 100-4 the currently effective Summary of Rates and Charges of this Tariff and is incorporated herein by reference.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was: (a) discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.

The charges above are set forth in the currently effective Sheet No. 100-2 Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Unauthorized Gas

At PSNC's sole discretion, and upon prior written notification and approval, on-peak-emergency Service as defined in Rider A of this Tariff shall be available to Customers served during any billing period when Customer is served under this Rate Schedule. If PSNC does not authorize on-peak-emergency Service, and in the event a Customer fails to discontinue the use of Gas after two hours' notice that Gas Service under this ~~schedule Rate Schedule~~ is not available, all Gas so used shall be paid for by the Customer at the rate for Unauthorized Gas set forth under Rider A in Sheet No. 400-2 in the currently effective Summary of Rates and Charges of this Tariff plus the cost of Gas used, as calculated under Rider A of this Tariff in addition to the regular energy charge for such Gas. In addition, Customer shall reimburse PSNC for any expenses and liabilities imposed on PSNC caused by Customer's failure to discontinue use of Gas.

Rules and Regulations

Service under this ~~schedule Rate Schedule~~ is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC and/or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Gas Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

## RATE SCHEDULE NO.165

## SPECIAL TRANSPORTATION RATE

This Rate Schedule is available to any Rate Schedule No. 180 Customer that has installed and operable alternate fuel capability on those occasions when PSNC has transportation Service available that is not needed to provide Service under its other Rate Schedules containing fixed rates. PSNC may require Customer to demonstrate that its alternate fuel capability is able to operate prior to providing Service under this Rate Schedule. This Rate Schedule is designed to permit PSNC to sell such transportation Service. All sales under this Rate Schedule are provided only in accordance with PSNC's guidelines as may be revised from time to time.

All transportation Service purchased under this Rate Schedule shall be measured separately from Gas purchased or transported under any other Rate Schedule. Service under this Rate Schedule is temporary and PSNC has the right to discontinue such Service on two hours' notice. Service under this Rate Schedule will be provided at PSNC's sole discretion.

In order to receive Service under this Rate Schedule, Customer must maintain separately metered Accounts for each type of alternate fuel. On any given Account, all equipment must be able to accept 100% curtailment on two hours' notice and be capable of burning the same type of alternate fuel. Customer must be capable of being 100% curtailed on two hours' notice. In case of non-compliance with a curtailment order, PSNC shall have the right to valve off Service when it is necessary in PSNC's sole opinion to protect Service to higher margin Customers.

Rate

Customer shall pay PSNC for all Service provided under this Rate Schedule at a rate determined prior to delivery, plus the Facilities Charge which is set forth on the currently effective Summary of Rates and Charges of this Tariff and incorporated herein by reference.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Unauthorized Gas

At PSNC's sole discretion, and upon prior written notification and approval, emergency Service as defined in Rider A of this Tariff shall be available to Customers served during any billing period when Customer is served under this Rate Schedule. If PSNC does not authorize emergency Service, and in the event a Customer fails to discontinue the use of Gas after two hours' notice that Service under this Rate Schedule is not available, all Gas so used shall be paid for by Customer at the rate for Unauthorized Gas set forth in the currently effective Summary of Rates and Charges of this Tariff plus the cost of Gas used, as calculated under Rider A of this Tariff. In addition, Customer shall reimburse PSNC for any expenses and liabilities imposed on PSNC caused by Customer's failure to discontinue use of Gas.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

PUBLIC SERVICE COMPANY OF N.C., INC.  
N.C.U.C. TARIFF

Rate Schedule No. 175  
~~Sheet No. 175-4~~ Page 1 of 2

#### RATE SCHEDULE NO. 175

##### FIRM TRANSPORTATION SERVICE FOR CUSTOMERS QUALIFYING FOR SERVICE ON RATE SCHEDULE NO. 145

Firm transportation Service under this Rate Schedule may be offered to a large commercial or industrial Customer that is presently connected to PSNC's system, has qualified for Service on Rate Schedule No. 145, has obtained an independent supply of Gas, and has made arrangements to have Gas delivered to one of PSNC's existing Receipt Points. All transportation under this Rate Schedule is provided in accordance with PSNC's Transportation Pooling Agreement, as it may be revised from time to time.

Once a qualified Customer elects Service under this Rate Schedule, Service will be provided for a term extending through the following ~~May-August 31~~. ~~Subject to the consent of PSNC, Customer may, subject to the consent of the Company, elect to discontinue Service under this Rate Schedule and receive Service from Rate Schedule No. 145 by giving written notice to the Company PSNC prior to March-June 1 of any year. The Company PSNC will grant such consent provided that if it has, or is able to acquire firm gas under commercially reasonable terms and conditions, the necessary Gas supplies and capacity under reasonable conditions to provide Service to Customer under Rate Schedule No. 145. Proper notice having been provided and consent obtained, with the Company's consent Customer shall discontinue Service under this Rate Schedule effective the first June-September 1 following the notice.~~

Gas transported under this Rate Schedule shall be separately measured from Gas purchased or transported under any other Rate Schedule. Neither separate Accounts nor separate locations may be combined to qualify for the minimum quantity provision of this Rate Schedule.

PSNC may refuse Service under this Rate Schedule if PSNC determines that:

- 1) it does not have Gas delivery capacity in excess of the requirements of its other existing Customers; or
- 2) the requested Service would require an uneconomic enlargement or extension of PSNC's facilities.

#### Rate

The applicable monthly Facilities Charge and the applicable Transportation Charge are set forth in the currently effective ~~Sheet No. 100-2~~ Summary of Rates and Charges of this Tariff and are incorporated herein by reference.

The minimum monthly bill is the Facilities Charge.

#### Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was ~~(a) discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.~~

The charges above are set forth in the currently effective ~~Sheet No. 100-2~~ Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

#### Balancing of Transportation Quantities

At any time when Customer is consistently using more or less Gas than is being delivered to PSNC for Customer's Account, it shall be Customer's or its agent's responsibility to bring its supply and requirements into balance in accordance with PSNC's Transportation Pooling Agreement, as it may be revised from time to time. Customer, Customer's agent, and PSNC shall strive to keep the transportation quantities within a reasonable operating balance at all times. Customer or its agent shall notify PSNC immediately in the event of increases or reductions in the quantity of Gas being transported.

PUBLIC SERVICE COMPANY OF N.-C., INC.  
N.C.U.C. TARIFF

Rate Schedule No. 175  
Sheet No. 175-2 Page 2 of 2

#### RATE SCHEDULE NO. 175 (Continued)

##### Notice Required; Inability to Obtain Independent Supply of Gas

~~Customer or its agent shall notify PSNC immediately in the event of increases or reductions in the quantity of Gas being transported. In the event Customer is unable to obtain its independent supply of Gas, PSNC may, at its sole discretion, supply Gas to Customer. The Energy Charge for such Gas will be the Rate Schedule No. 145 Energy Charge set forth in the currently effective Summary of Rates and Charges of this Tariff; provided that, when PSNC is required to purchase incremental quantities of Gas to accommodate Customer's supply requirements, the Energy Charge shall be calculated on a daily basis as the higher of: (a) the Rate Schedule No. 145 Energy Charge or (b) the sum of the monthly daily commodity gas cost of Gas supplied and the Rate Schedule No. 175 Transportation Charge. The daily commodity cost of Gas shall be the absolute high price for the day of consumption as published in Gas Daily in the "Daily price survey," "Citygates," "Transco, zone 5 delivered," "Absolute," high end of the range. For days of consumption when Gas Daily is not published, the daily price published by Gas Daily on the nearest subsequent day shall be used.~~

~~The monthly commodity gas cost shall be the sum of the monthly index price, the 100% Load Factor equivalent of Transcontinental Pipe Line Corporation's Zone 3 to Zone 5 Maximum FT Rate, fuel, and Other Gas Supply Charges. The monthly commodity gas cost shall be determined monthly to reflect changes in the values used in the computation.~~

~~The monthly index price for a particular month shall mean the sum of \$0.003 per therm plus the NYMEX price for Henry Hub Natural Gas contracts for that month established at the close of the third business day before the beginning of that month.~~

##### Rules and Regulations

~~Service under this schedule Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC and/or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Gas Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.~~

Issued by D. Russell Harris, President and Chief Operating Officer

Issued on ~~October 29, 2007~~ November 1, 2008

Issued under North Carolina Utilities Commission Docket No. G-5, Sub 484495

Effective November 1, 2007-2008

## RATE SCHEDULE NO. 180

INTERRUPTIBLE TRANSPORTATION SERVICE  
FOR CUSTOMERS QUALIFYING FOR SERVICE ON RATE SCHEDULE NO. 150

Interruptible Transportation Service under this Rate Schedule may be offered to a large commercial or Industrial Customer who ~~that~~ is presently connected to PSNC's system, has qualified for Service on Rate Schedule No. 150, has obtained an independent supply of Gas, and has made arrangements to have Gas delivered to one of PSNC's existing Receipt Points. All transportation under this Rate Schedule is provided in accordance with PSNC's Transportation Pooling Agreement, as may be revised from time to time.

Once a qualified Customer elects Service under this Rate Schedule, Service will be provided for a term extending through the following ~~May-August 31~~. ~~Subject to the consent of PSNC, Customer may, subject to the consent of the Company, elect to discontinue Service under this Rate Schedule and receive Service from Rate Schedule No. 150 by giving written notice to the Company PSNC prior to March-June 1 of any year. The Company PSNC will grant such consent provided that if it has, or is able to acquire gas under commercially reasonable terms and conditions, the necessary Gas supplies and capacity under reasonable conditions to provide Service to Customer under Rate Schedule No. 150. Proper notice having been provided and consent obtained, with the Company's consent Customer shall discontinue Service under this Rate Schedule effective the first June-September 1 following the notice.~~

Gas transported under this Rate Schedule shall be separately measured from Gas purchased or transported under any other Rate Schedule. Neither separate Accounts nor separate locations may be combined to qualify for the minimum quantity provision of this Rate Schedule.

PSNC may refuse transportation Service if PSNC determines that:

- 1) it does not have Gas delivery capacity in excess of the requirements of its other existing Customers; or
- 2) the requested Service would require an uneconomic enlargement or extension of PSNC's facilities; or
- 3) the provision of the requested Service might unreasonably increase the average cost of Gas purchased by PSNC for sales to other Customers due to PSNC's demand charge obligations, minimum bill obligations, or the take or pay obligations of ~~Transco~~ Transcontinental Pipe Line Corporation.

PSNC will attempt to deliver Gas transported for Customer's Account under this Rate Schedule on a day-to-day basis in accordance with Customer's requirements; however, PSNC reserves the right to suspend Service on any day when, in PSNC's sole opinion, its operating conditions are such that this is necessary.

Rate

The applicable monthly Facilities Charge and the applicable Transportation Charge are set forth in the currently effective ~~Sheet No. 100-2~~ Summary of Rates and Charges of this Tariff and are incorporated herein by reference.

When Customer has the installed and operable capability to burn an alternate fuel and the equivalent alternate fuel cost is less than the combined cost of Gas received from Customer's independent supply and the ~~transportation~~ Transportation charge applicable under this Rate Schedule, Customer may be served under ~~PSNC's Rate Schedule No. 460190~~. In order to receive Service under Rate Schedule No. 460190, Customer must maintain separately metered Accounts for each type of alternate fuel.

The minimum monthly bill is the Facilities Charge. The Facilities Charge will be waived in any month when PSNC is unable to deliver any Gas during that billing month. Service under this ~~Tariff Rate Schedule~~ is subject to PSNC's Rider A of this Tariff.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year.

## RATE SCHEDULE NO. 180 (Continued)

The charges above are set forth in the currently effective ~~Sheet No. 100-2~~ Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Balancing of Transportation Quantities

At any time when Customer is consistently using more or less Gas than is being delivered to PSNC for Customer's Account, it shall be Customer's or its agent's responsibility to bring its supply and requirements into balance in accordance with PSNC's Transportation Pooling Agreement, as it may be revised from time to time. Customer, Customer's agent, and PSNC shall strive to keep the transportation quantities within a reasonable operating balance at all times. Customer or its agent shall notify PSNC immediately in the event of increases or reductions in the quantity of Gas being transported.

Notice Required: Inability to Obtain Independent Supply of Gas

~~Customer or its agent shall notify PSNC immediately in the event of increases or reductions in the quantity of Gas being transported.~~ In the event Customer is unable to obtain its independent supply of Gas, PSNC may, at its sole discretion, supply Gas to Customer. ~~The energy~~ Energy charge ~~Charge~~ for such Gas will be the Rate Schedule No. 150 Energy Charge ~~set forth in the currently effective Summary of Rates and Charges of this Tariff; provided that, when PSNC is required to purchase incremental quantities of Gas to accommodate Customer's supply requirements, the Energy Charge shall be calculated on a daily basis as the higher of: (a) the Rate Schedule No. 150 Energy Charge or (b) the sum of the monthly daily commodity gas cost of Gas supplied and the Rate Schedule No. 180 Transportation Charge.~~ The daily commodity cost of Gas shall be the absolute high price for the day of consumption as published in Gas Daily in the "Daily price survey," "Citygates," "Transco, zone 5 delivered," "Absolute," high end of the range. For days of consumption when Gas Daily is not published, the daily price published by Gas Daily on the nearest subsequent day shall be used.

~~The monthly commodity gas cost shall be the sum of the monthly index price, the 100% Load Factor equivalent of Transcontinental Pipe Line Corporation's Zone 3 to Zone 5 Maximum FT Rate, fuel, and Other Gas Supply Charges. The monthly commodity gas cost shall be determined monthly to reflect changes in the values used in the computation.~~

~~The monthly index price for a particular month shall mean the sum of \$.003 per therm plus the NYMEX price for Henry Hub Natural Gas contracts for that month established at the close of the third business day before the beginning of that month.~~

Unauthorized Gas

In the event a Customer fails to discontinue the use of Gas after two hours' notice that Gas under this ~~schedule~~ Rate Schedule is not available, all Gas so used, other than for an allowance of 10 Therms per day for pilot usage, shall be paid for by Customer at the rate for Unauthorized Gas set forth under Rider A in ~~Sheet No. 100-2~~ in the currently effective Summary of Rates and Charges of this Tariff plus the cost of Gas used, as calculated under Rider A of this Tariff ~~in addition to the regular commodity charge for such Gas.~~ In addition, Customer shall reimburse PSNC for any expenses or liabilities imposed on PSNC that are caused by Customer's failure to discontinue use of Gas.

Rules and Regulations

Service under this ~~schedule~~ Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC and/or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Gas Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.



RATE SCHEDULE NO. 195

NATURAL GAS VEHICLE DEVELOPMENTAL RATE

~~This optional Rate Schedule is closed and not available except to Customers receiving Service under this rate as of November 1, 2006, who are purchasing Gas for use in Gas-powered vehicles. This rate is to aid in demonstrating the viability of Gas vehicles. The rate will apply only to the specified equipment and only for a period of three (3) years.~~

~~All Gas purchased under this Rate Schedule shall be separately measured from any Gas purchased or transported under any other Rate Schedule. This rate will apply for a period of three (3) years from Meter activation. After this period, the Account will be reclassified to the appropriate Rate Schedule.~~

Rate

~~The applicable monthly Facilities Charge and the Energy Charge are set forth in that portion of the currently effective Sheet No. 100-2 of this Tariff and are incorporated herein by reference. Rider B, Special Fuels Tax Act, is also incorporated by reference.~~

~~The minimum monthly bill is the amount of the Facilities Charge.~~

Payment of Bills

~~Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for Customers whose Service was: (a) discontinued for nonpayment of bill or (b) discontinued and reconnected at the request of Customer at the same Premises within the past year.~~

~~The above charges are set forth in the currently effective Sheet No. 100-2 of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.~~

Rules and Regulations

~~Service under this schedule is subject to all lawful orders, rules and regulations of duly constituted governmental authorities having jurisdiction over either PSNC and Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm or corporation by reason of PSNC's curtailing Gas Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.~~

PUBLIC SERVICE COMPANY OF N.-C., INC.  
N.C.U.C. TARIFF

Rider A  
Rider A Page 1 of 1

CURTAILMENT OF SERVICE UNDER NCUC RULE R6-19.2  
AND EMERGENCY SERVICES - RIDER A

1. PSNC shall curtail service to its ~~customers~~ Customers in accordance with Rule R6-19.2, as promulgated, and amended from time to time, by the Commission.
2. PSNC does not maintain metering by priority but shall do so if required by Rule R6-19.2.
3. Nothing shall be construed to require PSNC to curtail any Customer if such curtailment will not make additional Gas available for Service to higher margin Customers. ~~Developmental Rate Schedules shall be assumed to have a margin equivalent to rate schedule No. 125 for curtailment purposes.~~
4. The definition of alternate fuel in Rule R6-19.2 applies only to the priority system. For purposes of PSNC's Rate Schedules, alternate fuel capability is defined as the actual installed capability to burn any fuel other than Gas. An alternate fuel is that fuel which is predominately burned when Service is curtailed and includes the type, grade, and sulfur content of the fuel.
5. The cost of Gas for Emergency Service under this Rider A and for Unauthorized Gas under PSNC's Rate Schedules is calculated by using the higher of: (a) the monthly contract index price for the applicable month as published in Inside F.E.R.C.'s Gas Market Report, "Prices of Spot Gas Delivered to Pipelines," "Transcontinental Gas Pipe Line Corp. - Zone 3 (pooling points)," "Index," plus the one hundred percent (100%) load factor rate under Transcontinental Pipe Line Corporation's currently effective Rate Schedule FT for deliveries from Zone 3 to Zone 5, including applicable fuel retention and surcharges, or (b) the absolute high price for the day of consumption as published in Gas Daily in the "Daily price survey," "Citygates," "Transco, zone 5 delivered," "Absolute," high end of the range. For days of consumption when Gas Daily is not published, the daily price published by Gas Daily on the nearest subsequent day shall be used.
56. Limited Emergency Service may be made available to any Customer, other than those served on Rate Schedule No. 160, that would otherwise be curtailed under this Rider A if such Customer is unable to continue operations on its standby or alternate energy source because of some bona fide existing or threatened emergency when and if PSNC has Gas available from its regular allocated storage volumes or some outside source other than its regular services. PSNC, in its sole discretion, may furnish such Limited Emergency Service for such specific times and for such specific controlled quantities at a Rate the rate for this Service set forth in the currently effective Sheet No. 100-2 that relates to this service, and such rate is incorporated herein by reference Summary of Rates and Charges of PSNC's Tariff, plus the cost of the Gas supplied as calculated under paragraph 5 of this Rider A.
67. On-Peak Emergency Service may be made available to any Customer, that would otherwise be curtailed, while PSNC is utilizing a peak shaving capability (e.g., Liquefied-liquefied Natural-natural Gas). PSNC shall determine the extent and timing of such service Service, and service Service may be discontinued at the sole discretion of PSNC. If, at any time or during any twenty four (24) hour period commencing at 8:00 a.m., PSNC, in its sole opinion, determines to operate a peak shaving facility to inject Liquefied-liquefied Natural-natural Gas into the system, then all Emergency Service Gas purchased by the Customer during such day or days shall be considered to be On-Peak Emergency Service for billing and operating purposes and shall be provided at a Rate the rate for this Service set forth in the currently effective Sheet No. 100-2, which is incorporated herein by reference Summary of Rates and Charges, plus the cost of the Gas supplied as calculated under paragraph 5 of this Rider A.
78. All Emergency Gas Service is of a discretionary nature and implies no present ~~and~~ or future obligation of PSNC to any Customer to provide any such service Service on either a temporary or continuing basis. Deliveries of Gas hereunder shall be made pursuant only to advance operating arrangements agreed to in writing by PSNC's Gas Dispatching Department and the Customer and shall be subject to curtailment and interruption at any time that PSNC in its sole discretion deems such curtailment or interruption necessary.
89. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation, by reason of PSNC's curtailing regular or emergency service Service in accordance with any order of priorities which may be necessary under existing conditions.
910. All programs, agreements, contracts, Rate Schedules, and rules and regulations for Service by PSNC are subject to change and modification from time to time by PSNC, as such are approved by the North Carolina Utilities Commission or otherwise imposed by lawful authority.

PUBLIC SERVICE COMPANY OF N. C., INC.  
N.C.U.C. TARIFF

Rider B

~~COMPRESSED NATURAL GAS - RIDER B~~

~~SPECIAL FUELS TAX ACT~~

~~The purpose of this Rider is to recover the special fuels tax which is levied when natural Gas is used as a vehicular motor fuel for highway use.~~

~~This Rider is applicable to Service Rate Schedules No. 125 and 195 and shall be in addition to the published rates.~~

~~This Rider shall apply to all natural Gas supplied by PSNC under the above Rate Schedules when such natural Gas is used by the Customer in an internal combustion engine or motor to propel motor vehicles on the public highways pursuant to General Statute 105-449.16.~~

~~Rate Per Month~~

~~PSNC shall recover from the Customer the special fuels tax required to be paid to the North Carolina Department of Revenue. The tax is currently computed by the North Carolina Department of Revenue, Gasoline Tax Division by equating one Ccf of natural Gas to one gallon of liquid gasoline fuel and then applying the statutory tax rate per gallon of fuel. PSNC will change its rate to match the amount and effective date of any change in the tax as required by the North Carolina Department of Revenue.~~

~~Special Conditions~~

~~All natural Gas used under this Rider shall be separately metered from any other use by PSNC.~~

Issued by D. Russell Harris, President and Chief Operating Officer  
Issued on November 1, 2006  
Issued under North Carolina Utilities Commission Docket No. G-5, Sub 481

Effective November 1, 2006

# CUSTOMER USAGE TRACKER - RIDER C

## I. Definitions

"Customer Usage Deferred Account" shall mean a deferred account established under this Rider C subject to the Customer Usage Deferred Account Adjustment for such account.

"Customer Usage Deferred Account Adjustment" shall mean a monthly adjustment to the applicable Customer Usage Deferred Account as calculated under this Rider C.

"Customer Usage Adjustment" shall mean a per-Therm amount calculated under this Rider C, as a decrement or increment, to refund or recover the balance in the applicable Customer Usage Deferred Account.

"Relevant Rate Order" shall mean the final Order of the Commission in PSNC's most recent rate case fixing PSNC's rates or the most recent final order of the Commission specifically prescribing the factors and procedures to be used in the application of this Rider C.

## II. Applicable Rate Schedules

The base rates for Service under PSNC's Rate Schedule Nos. 101, 102, 125, and 127 shall be subject to a Customer Usage Adjustment in accordance with this Rider C.

## III. Computation of Customer Usage Deferred Account Adjustment

The Customer Usage Deferred Account Adjustment for each of the applicable rate classes shall be computed monthly to the nearest dollar using the following formulas:

Base Load Therms<sub>i</sub> = Actual Customers<sub>i</sub> x Base Load<sub>i</sub>

Heat Sensitive Therms<sub>i</sub> = Actual Customers<sub>i</sub> x Heat Sensitivity Factor<sub>i</sub> x Normal Degree Days

Normalized Therms<sub>i</sub> = Base Load Therms<sub>i</sub> + Heat Sensitive Therms<sub>i</sub>

Normalized Margin<sub>i</sub> = Normalized Therms<sub>i</sub> x R Factor<sub>i</sub>

Actual Margin<sub>i</sub> = Actual Therms<sub>i</sub> x R Factor<sub>i</sub>

Customer Usage Deferred Account Adjustment<sub>i</sub> = Normalized Margin<sub>i</sub> - Actual Margin<sub>i</sub>

Where:

i = any particular rate class

Actual Customers<sub>i</sub> = actual customers billed for the billing cycle month for the i<sup>th</sup> rate class

Actual Therms<sub>i</sub> = actual Therms used for the billing cycle month for the i<sup>th</sup> rate class

R Factor<sub>i</sub> = base rate (approved rate less fixed and commodity cost of Gas) for the i<sup>th</sup> rate class used by the Commission in the Relevant Rate Order for the purpose of determining normalized test year revenues

Heat Sensitivity Factor<sub>i</sub> = heat sensitivity factor for the i<sup>th</sup> rate class used by the Commission in the Relevant Rate Order for the purpose of determining normalized test year revenues

Normal Degree Days = average normal heating degree days used by the Commission in the Relevant Rate Order for the purpose of determining normalized test year revenues

Base Load<sub>i</sub> = base load sales for the i<sup>th</sup> rate class used by the Commission in the Relevant Rate Order for the purpose of determining normalized test year revenues

**IV. Monthly Reports**

PSNC will file with the Commission monthly reports that include: (a) computation of each Customer Usage Deferred Account Adjustment; (b) a schedule showing the effective date of each Customer Usage Deferred Account Adjustment; and (c) a schedule showing the factors of values derived from the Relevant Rate Order used in calculating each Customer Usage Deferred Account Adjustment. Such reports will be filed within 45 dates after the end of the applicable month.

**V. Computation of Customer Usage Adjustment**

Effective for the first day of the April billing cycle month and the first day of the October billing cycle month, the Customer Usage Adjustment for each of the applicable Rate Schedules shall be calculated to the nearest one-thousandth of a cent per Therm using the following formula:

$$\text{Customer Usage Adjustment}_i = \text{Customer Usage Deferred Account Balance}_i / \text{Annual Therms}_i$$

Where:

$$i = \text{any particular rate class}$$

$$\text{Customer Usage Deferred Account Balance}_i = \text{balance of Customer Usage Deferred Account as of the end of January or July, as applicable}$$

$$\text{Annual Therms}_i = \text{normalized volumes assigned by the Commission in the Relevant Order}$$

**VI. Interest**

Interest will be applied to the Customer Usage Deferred Account at PSNC's overall rate of return authorized by the Commission in the Relevant Rate Order.

**VII. Filing with Commission**

PSNC will file a revision to its Tariff for Commission approval upon 14 days notice to implement a decrement or increment each April and October. The filing will include the computation of each Customer Usage Adjustment.

# PURCHASED GAS ADJUSTMENT PROCEDURES - RIDER D

## I. Definitions

"Gas Costs" shall mean the total delivered cost of gas paid or to be paid to Suppliers, including but not limited to all commodity/gas charges, all direct transaction-related costs arising from PSNC's prudent efforts to stabilize or hedge commodity gas costs, demand charges, peaking charges, surcharges, emergency gas purchases, over-run charges, capacity charges, standby charges, reservation fees, gas inventory charges, minimum bill charges, minimum take charges, take-or-pay charges, take-and-pay charges, storage charges, service fees and transportation charges, and any other similar charges associated with the purchase, storage, or transportation of gas for PSNC's system supply.

"Suppliers" shall mean any person or entity, including an affiliate of PSNC, who locates, produces, purchases, sells, stores and/or transports gas or its equivalent for or on behalf of PSNC, or who provides hedging tools, including, but not limited to financial tools, designed to stabilize PSNC's commodity prices. Suppliers may include, but are not limited to, interstate pipeline transmission companies, producers, brokers, marketers, associations, intrastate pipeline transmission companies, joint ventures, providers of Liquefied Natural Gas, Liquefied Petroleum Gas, Synthetic Natural Gas and other hydrocarbons used as feed stock, other Local Distribution Companies, and end-users.

"Benchmark Commodity Gas Costs" shall mean PSNC's estimate of the City Gate Delivered Gas Costs for long-term gas supplies, excluding Demand Charges and Storage Charges as approved in PSNC's last general rate case or gas cost adjustment proceeding.

"City Gate Delivered Gas Costs" shall mean the total delivered Gas Costs to PSNC at its city gate.

"Commodity and Other Charges" shall mean all Gas Costs other than Demand Charges and Storage Charges and any other Gas Costs determined by the Commission to be properly recoverable from sales customers.

"Demand Charges and Storage Charges" shall mean all Gas Costs which are not based on the quantity of gas actually purchased or transported by PSNC and any other Gas Costs determined by the Commission to be properly recoverable from customers, including company use and unaccounted for costs.

"Other Gas Supply Charges" shall mean the per therm supply reservation fees. These charges shall be determined on an annual basis by dividing the total estimated reservation fees to be paid under the firm supply contracts by the total estimated quantities to be purchased under these contracts.

## II. Rate Adjustments Under These Procedures

If PSNC anticipates a change in its City Gate Delivered Gas Costs, it may apply and file revised tariffs effective on 14 days notice in order to increase or decrease its rates to its customers as hereinafter provided. The Commission may issue an order allowing the rate change to become effective simultaneously with the effective date of the change or at any time ordered by the Commission. If the Commission has not issued an order within 120 days after the application, PSNC may place the requested rate adjustment into effect.

1. Demand Charges and Storage Charges. Whenever PSNC anticipates a change in the Demand Charges and Storage Charges, it may (as hereinabove provided) change its rates to customers under each applicable Rate Schedule by an amount computed as follows:

$$\begin{array}{l} \text{(Total Anticipated Demand Charges and} \\ \text{Storage Charges - Prior Demand Charges} \\ \text{and Storage Charges)} \\ \text{x Rate Schedule Percentage*} \\ \hline \text{Sales \& Transportation Quantities* (by Rate} \\ \text{Schedule)} \end{array} = \begin{array}{l} \text{Increase} \\ \text{(Decrease) Per Unit} \end{array}$$

\* Established by the Commission in the last general rate case.

2. Commodity and Other Charges. Whenever PSNC's estimate of its Benchmark Commodity Gas Costs changes, it may (as hereinabove provided) change the rates to its customers purchasing gas under sales rate schedules, incorporating the Benchmark Commodity Gas Costs, by an amount computed as follows:

$$\frac{\text{Quantities of gas purchased * (excluding Company Use and Unaccounted For) x (New Benchmark Commodity Gas Costs - Old Benchmark Commodity Gas Costs)}}{\text{Quantities of gas purchased for System Supply * (excluding Company Use and Unaccounted For)}} = \begin{matrix} \text{Increase} \\ \text{(Decrease) Per Unit} \end{matrix}$$

\* Established by the Commission in the last general rate case.

3. Company Use and Unaccounted For. Whenever PSNC's estimate of its Benchmark Commodity Gas Costs changes, it may (as hereinabove provided) change the rates to its customers, by an amount computed as follows:

$$\frac{\text{Quantities of Company Use and Unaccounted For Gas* x (New Benchmark Commodity Gas Costs - Old Benchmark Commodity Gas Costs)}}{\text{Sales \& Transportation Quantities*}} = \begin{matrix} \text{Increase} \\ \text{(Decrease) Per Unit} \end{matrix}$$

\* Established by the Commission in the last general rate case.

4. Other Changes in Purchased Gas Costs. The intent of these procedures is to permit PSNC to recover its actual prudently incurred Gas Costs. If any other Gas Costs are incurred, they will be handled as in Section 1 if they are similar to Demand Charges and Storage Charges, or as in Section 2 if they are similar to Commodity and Other Charges.

### III. True-up of Gas Costs

**Demand Charges and Storage Charges.** On a monthly basis, PSNC shall determine the difference between (a) Demand Charges and Storage Charges billed to its customers in accordance with the Commission-approved allocation of such costs to PSNC's various Rate Schedules and (b) PSNC's actual Demand Charges and Storage Charges. This difference shall be recorded in PSNC's deferred account for demand and storage charges. Increments and decrements for Demand Charges and Storage Charges flow to applicable sales and transportation rate schedules. For purposes of this true-up, company use and unaccounted for costs will be excluded since they are subject to a separate true-up.

**Commodity and Other Charges.** On a monthly basis, PSNC shall determine with respect to gas sold (including company use and unaccounted for) during the month, the per unit difference between (a) the Benchmark Commodity Gas Costs most recently approved and (b) the actual Commodity and Other Charges incurred. The product of the actual quantities multiplied by the per unit difference shall be recorded in PSNC's deferred account for commodity and other charges. On a monthly basis, PSNC shall determine with respect to gas sold in previous months under its residential and commercial rate schedules, the difference between amounts billed for Gas Costs and the amounts actually recovered from customers for such Gas Costs. Such uncollectible Gas Costs shall be recorded in PSNC's deferred account for commodity and other charges. Any such deferred amounts that are subsequently paid by customers shall be credited to PSNC's deferred account for commodity and other charges. Increments and decrements for Commodity and Other Charges shall flow to all sales rate schedules incorporating the Benchmark Commodity Gas Costs.

**Company Use and Unaccounted For.** PSNC will true-up Gas Costs associated with company use and unaccounted for quantities annually. This shall be done by comparing the actual company use and unaccounted for quantities during the true-up period with the rate case approved company use and unaccounted for quantities used to establish rates during the twelve-month true-up period. Where there is more than one approved company use and unaccounted for quantities during the true-up period, the average monthly level will be used. The resulting quantities will be multiplied by the average of the Benchmark Commodity Gas Costs at the end of each month of the true-up period, and the resulting amount will be recorded in the deferred account for Demand and Storage Charges.

Supplier Refunds and Direct Bills. If PSNC receives supplier refunds or direct bills with respect to gas previously purchased, the amount of such supplier refunds or direct bills will be recorded in the appropriate deferred Account, unless directed otherwise by the Commission.

**IV. Other**

Gas Costs changes not tracked concurrently shall be recorded in the appropriate deferred account.

The Commodity and Other Charges portion of gas inventories shall be recorded at actual cost and the difference in that cost and the Benchmark Commodity Gas Costs most recently approved shall be recorded in the deferred account when the gas is withdrawn from inventory.

PSNC shall file with the Commission (with a copy to the Public Staff) a complete monthly accounting of the computations under these procedures, including all supporting workpapers, journal entries, etc., within 45 days after the end of each monthly reporting period. All such computations shall be deemed to be in compliance with these procedures unless within 60 days of such filing the Commission or the Public Staff notifies PSNC that the computations may not be in compliance; provided, however, that if the Commission or the Public Staff requests additional information reasonably required to evaluate such filing, the running of the 60 day period will be suspended for the number of days taken by PSNC to provide the additional information.

Periodically, PSNC may file to adjust its rates to refund or collect balances in these deferred accounts through decrements or increments to current rates. In filing for an increment or decrement, PSNC shall state the amount in the deferred account, the time period during which the increment or decrement is expected to be in effect, the rate classes to which the increment or decrement is to apply, and the level of quantities estimated to be delivered to those classes. Any such increments or decrements shall be made on a percentage basis for all affected rate classes as determined in PSNC's most recent general rate case, unless otherwise ordered by the Commission.

PSNC may negotiate with commercial and industrial customers on its sales and transportation rates to avoid the loss of deliveries to these customers. All margin loss from those customers served under Rate Schedule No. 160 which would otherwise have purchased or transported gas under Rate Schedule Nos. 150 and 180 shall be recorded in the deferred account for Demand Charges and Storage Charges. Such margin loss shall be based on the currently effective rates. PSNC may offset negotiated losses in any manner authorized by the Commission.



PUBLIC SERVICE COMPANY OF N. C., INC.  
N.C.U.C. TARIFF

Rider E

# WEATHER NORMALIZATION ADJUSTMENT—RIDER E

## Applicability

This factor shall be applicable to Rate Schedule Numbers 101 and 125. The base rate for each of these schedules shall be adjusted by an amount calculated as described below which shall be known as the Weather Normalization Adjustment. This adjustment shall be applied to all bills rendered during the months of November through April. Any small industrial Customer served under Rate Schedule No. 125 may obtain an exemption from this rate adjustment by filing a request with PSNC that establishes the absence of a statistically significant correlation between its natural gas use and the weather.

## Computation of the Weather Normalization Adjustment

The Weather Normalization Adjustment shall be computed to the nearest one ten thousandth of a cent per therm through the use of the following formula:

$$WNA_i = R_i \times \frac{(HSF_i(NDD - ADD))}{(BL_i + (HSF_i \times ADD))}$$

Where:

$i$  = any particular rate schedule that this factor is applied to

$WNA_i$  = Weather Normalization Factor for the  $i^{th}$  rate schedule expressed in cents per therm

$R_i$  = base rate (approved rate less cost of gas) for the  $i^{th}$  schedule

$HSF_i$  = heat sensitive factor for the  $i^{th}$  rate schedule approved by the Commission in the last general rate case for the purpose of determining normalized test year revenues

$NDD$  = normal billing cycle heating degree days approved by the Commission in the last general rate case for the purpose of determining normalized test year revenues

$ADD$  = actual billing cycle heating degree days

$BL_i$  = base load sales for the  $i^{th}$  rate schedule approved by the Commission in the last general rate case for the purpose of determining normalized test year revenues

## Filing with the Commission

PSNC will file, as directed by the Commission, (a) a copy of the computations of the Weather Normalization Adjustment, (b) the effective dates for each adjustment and (c) the factors approved by the Commission used to calculate the Weather Normalization Adjustments.



## TRANSPORTATION POOLING AGREEMENT

THIS AGREEMENT is made this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, by and between PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INCORPORATED, a South Carolina corporation, doing business as, and hereinafter called, "PSNC Energy," with its main office at 800 Gaston Road, Gastonia, North Carolina 28056,

and

\_\_\_\_\_ (hereinafter "Pooler"), a

\_\_\_\_\_ corporation, with its main office at \_\_\_\_\_

WHEREAS, PSNC Energy is willing to permit its Customers or their agents, which obtain transportation, whether firm, released, or interruptible, or any other form of transportation, on an interstate Pipeline, to deliver Gas into PSNC Energy's system for the purpose of enabling PSNC Energy's Customers to satisfy all of their Gas requirements through the use of transportation Services provided by PSNC Energy; and

WHEREAS, Pooling will permit PSNC Energy's Customers or their agents to accumulate various privileges accorded individual transportation Customers for the benefit of a group of transportation Customers; and

WHEREAS, Pooling will benefit all of PSNC Energy's transportation Customers.

NOW, THEREFORE, for and in consideration of mutual covenants and promises contained herein, PSNC Energy agrees to permit Pooling, and Pooler agrees to pool Gas supplies hereunder, in accordance with the following terms and conditions:

### ARTICLE I Definitions

For the purposes of this Agreement, the following definitions shall apply:

1. "Customer(s)" means any recipient of transportation Service provided by PSNC Energy that procures its supply of Gas from a Pooler's Pool.
2. "Gas" means undiluted natural gas, or a substitute for natural gas, or any mixture of natural gas and a substitute for natural gas, as delivered by PSNC Energy.
3. "Pipeline" means any interstate pipeline, including Transco, which establishes a physical interconnection with PSNC Energy's pipeline system.
4. "Pool" shall mean an aggregation of Gas quantities for one or more PSNC Energy transportation Customers which Pooler establishes under this Agreement.
5. "Pooling" is a service provided by PSNC Energy whereby a broker, marketer, producer, or any consumer of Gas qualifying for transportation Service under PSNC Energy's tariffs, which obtains transportation (firm, released, interruptible, or any other form), on a Pipeline and aggregates Gas supplies needed to satisfy the full requirements of one or more transportation Customers of PSNC Energy, and such Customer or Customers have assigned its rights to Pooler as agent, or such Customer is acting on its own behalf, for the purpose of delivering Gas to PSNC Energy.
6. "Transco" means Transcontinental Gas Pipe Line Corporation.

Any capitalized terms used herein, which are not defined herein, shall have the meanings set forth in PSNC Energy's Rules and Regulations.



## **ARTICLE II**

### **Applicability**

All persons and entities that obtain transportation, whether firm, released, interruptible, or any other form of transportation, on a Pipeline for the purpose of delivering Gas to an interconnection between Pipeline and PSNC Energy shall be required to execute a Transportation Pooling Agreement. Only Unless PSNC Energy agrees otherwise, only a single pooler may sell Gas to a Customer Account in one calendar month.

## **ARTICLE III**

### **Term**

This Agreement shall commence on the first day of the first calendar month after the date of execution written above                     , 20                    , and shall continue thereafter for twelve (12) calendar months; provided, however, that the term shall be extended from year to year thereafter, subject to cancellation by either party upon expiration of the primary term or any subsequent one (1) year period upon at least thirty (30) days written notice given prior to expiration of the primary term or prior to the expiration of any one year period occurring thereafter. Notwithstanding the foregoing, PSNC Energy may cancel or discontinue service under this Agreement as provided in Articles VIII, IX, and X below.

## **ARTICLE IV**

### **Transportation Nomination Procedures**

For each month that this Agreement is in effect, Pooler must submit its nomination for each month's transportation to PSNC Energy in writing or by facsimile on or before the deadline date indicated on the "Transportation Nomination Schedule" as published periodically by PSNC Energy. Such nominations shall include the following information:

1. Pooler's legal name, Pipeline contract number, and Pipeline transportation activity number;
2. daily quantity (Daily MMBTU) to be delivered to PSNC Energy;
3. list including the names of all PSNC Energy Customers to be served by Pooler and the corresponding PSNC Energy Customer Account number(s); and
4. effective date of transportation Service.

Intra-month revisions to Gas quantities being delivered to PSNC Energy must be received by PSNC Energy in writing or by facsimile no later than 5 p.m. Eastern Time two days prior to the day of Gas flow.

## **ARTICLE V**

### **Pooling Procedures**

For each month that this Agreement is in effect, PSNC Energy will allow Pooler to create a Pool in which Pooler shall aggregate all Gas quantities delivered to PSNC Energy by Pooler for delivery to PSNC Energy's Customer(s) or Pooler pursuant to Article IV above. Pooler agrees to make deliveries into its Pool at daily rates that are reasonably even and constant. Pooler may increase or decrease daily Gas deliveries to PSNC Energy provided that any such change does not impair PSNC Energy's operating ability, as determined by PSNC Energy, in its sole discretion.

## **ARTICLE VI**

### **Gas Measurement**

The quantity and heating value of the Gas delivered by Pooler to PSNC Energy shall be determined by the transporting Pipeline(s) in the manner provided in its (their) tariff(s).



## ARTICLE VII Full Requirements Service

For each month that this Agreement is in effect, Pooler agrees to satisfy the full requirements for Gas for each PSNC Energy Customer Account on Pooler's designated list provided pursuant to Article IV for each such month. Pooler's ability to satisfy all such requirements for Gas in any month shall be determined by subtracting the Customers' actual consumption for the listed Customer Accounts in that month from the total actual deliveries received in that month on the Pooler's account. Any imbalance resulting from an adjustment to actual consumption or deliveries due to meter inaccuracy, billing error, or otherwise, after the month in which such Gas requirements were determined, shall be cashed out under the procedure provided in Article VIII with all adjusted quantities cashed out under either paragraph 1 for shortage quantities or paragraph 1 for excess quantities, as applicable.

## ARTICLE VIII Pool Balancing Procedures

In the event that Pooler's Pool has insufficient Gas available to satisfy the actual needs of the Customer Account(s) to be served from the Pool in any month, the cashout procedure shall be as follows:

1. If such shortage is less than or equal to five percent (5%) of the Customers' actual usage, PSNC Energy shall sell to Pooler Gas required to cover such shortage quantities at a rate equal to the first of the month price for the month in which such shortage occurred for Transco Station 65 as published in **Natural Gas Week**, plus the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, for each Dekatherm of such shortage.
2. If such shortage is greater than five percent (5%) but less than or equal to ten percent (10%) of the Customers' actual usage, PSNC Energy shall sell to Pooler Gas required to cover such shortage quantities at a rate equal to the higher of the first of the month price or the highest weekly price for any subsequent week for the month in which such shortage occurred for Transco Station 65 as published in **Natural Gas Week**, multiplied by a factor of one hundred and fifteen percent (115%), plus the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, for each Dekatherm of such shortage.
3. If such shortage is greater than ten percent (10%) of the Customers' actual usage, PSNC Energy shall sell to Pooler Gas required to cover such shortage quantities at a rate equal to the higher of the first of the month price or the highest weekly price for any subsequent week for the month in which such shortage occurred for Transco Station 65 as published in **Natural Gas Week**, multiplied by a factor of one hundred and twenty-five percent (125%), plus the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, for each Dekatherm of such shortage.

In the event that Pooler's Pool has Gas in excess of the actual needs of the Customer Account(s) in any month, the cashout procedure shall be as follows:

1. If such excess is less than or equal to five percent (5%) of the Customers' actual usage, for each Dekatherm of such overage, PSNC Energy shall purchase from Pooler such excess quantities of Gas at a rate equal to the first of the month price for the month in which the excess accumulated for Transco Station 65 as published in **Natural Gas Week**, plus (a) for the months of November through March, the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, or (b) for the months of April through October, the commodity rate under Transco's currently effective Rate Schedule FT for



deliveries from Transco's Zone 3 to Zone 5, including applicable fuel retention and surcharges, plus \$.05.

2. If such excess is greater than five percent (5%) but less than or equal to ten percent (10%) of the Customers' actual usage, for each Dekatherm of such overage, PSNC Energy shall purchase from Pooler such excess quantities of Gas at a rate equal to the lower of the first of the month price or lowest weekly price for the month in which the excess accumulated for any subsequent week for Transco Station 65 as published in **Natural Gas Week**, multiplied by a factor of eighty-five percent (85%) plus (a) for the months of November through March, the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, or (b) for the months of April through October, the commodity rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, including applicable fuel retention and surcharges, plus \$.05.

3. If such excess is greater than ten percent (10%) of the Customers' actual usage, for each Dekatherm of such overage, PSNC Energy shall purchase from Pooler such excess quantities of Gas at a rate equal to the lower of the first of the month price or lowest weekly price for any subsequent week for the month in which the excess accumulated for Transco Station 65 as published in **Natural Gas Week**, multiplied by a factor of seventy-five percent (75%) plus (a) for the months of November through March, the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, or (b) for the months of April through October, the commodity rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, including applicable fuel retention and surcharges, plus \$.05.

If, for any month, the imbalance in Pooler's Pool exceeds twenty-five percent (25%), either positive or negative, PSNC Energy shall have the right, in its sole discretion, to cancel this agreement and to suspend the Pooler's right to establish a Pool for delivery to Customers that transport on PSNC Energy's system for twelve (12) months.

#### **ARTICLE IX** **Creditworthiness**

PSNC Energy shall not commence service to Pooler, and has the right to discontinue service upon five (5) days' written notice to Pooler, if Pooler fails to meet PSNC Energy's creditworthiness criteria. PSNC Energy shall apply consistent evaluative practices to determine the acceptability of Pooler's overall financial condition, working capital, and profitability trends. Acceptable creditworthiness is demonstrated by meeting the following criteria:

1. At PSNC Energy's request, Pooler shall provide current financial statements, annual reports, 10-K reports or other filings with regulatory agencies which discuss the Pooler's financial status, a list of all corporate affiliates, parent companies and subsidiaries, and any reports from credit reporting and bond rating agencies which are available.

2. At PSNC Energy's request, Pooler shall provide a bank reference and at least two trade references. Pooler authorizes PSNC Energy to obtain a current credit report on Pooler to determine whether to extend credit and releases generally all creditors to disclose otherwise confidential information. The results of reference checks and any credit reports submitted must show that Pooler's obligations are being paid on a prompt basis.

3. At PSNC Energy's request, Pooler shall provide a guarantee by a person or another entity acceptable to PSNC Energy that satisfies the credit appraisal, or a standby irrevocable letter of credit drawn upon a bank acceptable to PSNC Energy.

4. Pooler must not be operating under any chapter of the bankruptcy laws and must not be subject to liquidation or debt reduction procedures under state laws such as an assignment for the benefit of creditors, or any informal creditors' committee agreement.



5. Pooler shall not be subject to the uncertainty of pending liquidation or regulatory proceedings in state or federal courts or before other governmental or regulatory bodies having jurisdiction, which could cause a substantial deterioration in its financial condition, a condition of insolvency, or an impairment of Pooler's ability to exist as an ongoing business entity.
6. Pooler shall have no significant collection lawsuits or judgments outstanding that might affect Pooler's ability to remain solvent.
7. If any of the events or actions described in paragraphs 4, 5, and 6 above shall be initiated or imposed during the terms of service under this Agreement, Pooler shall provide notification thereof to PSNC Energy within two (2) working days of any such initiated or imposed event or action.
8. If Pooler has an ongoing business relationship with PSNC Energy, no delinquent balances shall be consistently outstanding for undisputed billings made previously by PSNC Energy, and Pooler must have paid its account in the past according to the established terms and not made deductions or withheld payment for claims other than for disputed billings.

#### **ARTICLE X** **Billing and Payment**

No later than three (3) business days following PSNC Energy's end-of-the-month meter reading date for the month of delivery, PSNC Energy will provide Pooler with a statement detailing the total quantities delivered by Pooler into its Pool for the preceding month as well as the total metered consumption in MMBTU for each individual PSNC Energy Customer Account served by Pooler. Pooler is responsible for billing each of PSNC Energy's Customer(s) served from Pooler's Pool for all Gas consumed by such Customer(s) determined pursuant to Article VII above with the exception of unauthorized quantities or other penalties assessed directly to a Customer by PSNC Energy. PSNC Energy shall continue to bill its applicable transportation and Facilities Charges directly to the Customer.

If the total quantities present in Pooler's Pool fail to cover the total accumulated usage for PSNC Energy's Customer(s) served by Pooler's Pool in any month, PSNC Energy shall bill Pooler for any shortage quantities pursuant to the procedures described in Article VIII above. Such statement shall be furnished to Pooler by PSNC Energy no later than the fifth (5th) business day following PSNC Energy's end-of-the-month meter reading date for the month of delivery and is due and payable within ten (10) days after the statement date. A bill shall be deemed delinquent when it remains unpaid after the due date set forth on the bill. If Pooler fails to remit the full amount when due, interest on the unpaid portion shall accrue at a rate of one percent (1%) per month. If a Pooler withholds any portion of any amount billed by PSNC Energy as a disputed amount and any portion or all of the amount so withheld is determined to have been properly billed, then interest (as set forth above) shall accrue on the withheld amount that was properly billed from the date due until the date that PSNC Energy receives it. PSNC Energy may terminate this Agreement when any bill becomes delinquent.

If the total quantities present in Pooler's Pool exceed the total accumulated usage for the Customer(s) served from Pooler's Pool in any month, PSNC Energy shall purchase such Gas pursuant to the procedures described in Article VIII above. PSNC Energy shall furnish Pooler with a statement identifying the quantities purchased from Pooler no later than the fifth (5th) business day following PSNC Energy's end-of-the-month meter reading date for the month of delivery and shall pay Pooler no later than ten (10) days after the statement date.

#### **ARTICLE XI** **Force Majeure**

The term "Force Majeure," as used herein, and as applied to PSNC Energy or Pooler, shall mean acts of law including governmental bodies acting pursuant to law, acts of God, strikes, lockouts or other disturbances, acts of a public enemy, war, blockades, insurrections, riots, epidemics, lightning, fires, floods, washouts, arrests, civil disturbances, explosions, breakage or accidents to machinery or lines of pipe, freezing of wells or pipelines, or any other cause, whether of the kind enumerated or otherwise, not reasonably within the control of the affected party. It is understood and agreed that the settlement of strikes or lockouts shall be entirely within the discretion of the party affected.



Such causes or contingencies affecting the performance of this Agreement by PSNC Energy or the Pooler shall not relieve the affected party of liability unless such party shall give notice and full particulars of such cause or contingency in writing or by facsimile to the other party as soon as reasonably practical after the occurrence of the cause relied upon, nor shall such causes or contingencies affecting this Agreement by either party relieve it of liability in the event of its concurring negligence, nor shall such causes or contingencies affecting the performance of this Agreement relieve either party from its obligations to make payments of amounts due under the Agreement for Gas already allocated to the Customers served by Pooler.

## **ARTICLE XII** **Miscellaneous**

1. No modification of the terms and provisions of this Agreement shall be or become effective except by the execution of a written agreement or by modification of PSNC Energy's Tariff.
2. No waiver by any party of any one or more defaults by any other party in the performance of any provisions of this Agreement shall operate or be construed as a waiver or any other default or defaults, whether of a like or of a different character.
3. Any company, which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of PSNC Energy or of Pooler, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Agreement. Without relieving itself of its obligations under this Agreement, any party may assign any of its rights hereunder to a company with which it is affiliated, but otherwise no assignment of this Agreement or any of the rights or obligations hereunder shall be made unless there first shall have been obtained the consent thereto in writing of the other party, provided that such consent will not be unreasonably withheld.
4. Except as otherwise provided, any notice, request, demand, statement, or bill provided for in this Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when delivered to the United States Postal Service to be sent by registered or certified mail to the Post Office address of the parties hereto, as the case may be, or at such address as either party shall designate by formal written notice, as follows:

**Notices to PSNC Energy:**

PSNC Energy  
Attention: Transportation & Administration  
P O Box 1398  
Gastonia, North Carolina 28053-1398  
Telephone: (704) 834-6338  
Facsimile: (704) 834-6555

**Notices to Pooler:** (Enter Applicable Information)

\_\_\_\_\_  
Pooler Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City / State / Zip Code

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Fax Number

**Payments to PSNC Energy:**

PSNC Energy  
Wachovia, Charlotte, North Carolina  
ABA No: 0530-0021-9  
Account. No: 20706-59001624

**Payments to Pooler:** (Enter Applicable Information)

\_\_\_\_\_  
Pooler Name

\_\_\_\_\_  
Pooler Bank Name

\_\_\_\_\_  
ABA Number

\_\_\_\_\_  
Account Number



5. This Agreement and the respective obligations of the parties hereunder are subject to valid laws, orders, rules, and regulations of duly constituted authorities having jurisdiction.

6. The subject headings of the articles of this Agreement are inserted for the purpose of convenient reference and are not intended to be a part of the Agreement nor considered in any interpretation of the same.

7. The construction, interpretation, and performance of this Agreement shall be in accordance with the laws of the State of North Carolina, excluding any conflicts-of-law rule or principle which might refer the construction, interpretation, or performance of this Agreement to the law of another jurisdiction.

8. In the event of a conflict between the provisions of this Agreement and PSNC Energy's Tariff, PSNC Energy's Tariff shall control.

9. This Agreement supersedes all preexisting agreements for Pooling between PSNC Energy and Pooler.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed and witnessed, or their respective corporate seals to be hereto affixed and attested, the day and year first above written.

ATTEST: PSNC Energy

ATTEST: POOLER

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Type or Print)

Name: \_\_\_\_\_  
(Type or Print)

Title: \_\_\_\_\_

Title: \_\_\_\_\_

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Type or Print)

Name: \_\_\_\_\_  
(Type or Print)

Title: \_\_\_\_\_

Title: \_\_\_\_\_



PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
DOCKET NO. G-5, SUB 495  
PER BOOKS COST OF SERVICE STUDY  
FOR THE TEST YEAR ENDED DECEMBER 31, 2007

DESCRIPTION	TOTAL	RES	SGS	LGS FIRM	LGS INT
<b>OPERATING REVENUES</b>					
RATE SCHEDULE REVENUES	574,092,793	352,889,801	151,985,812	31,567,847	37,649,333
OTHER GAS REVENUES	3,221,664	2,743,207	475,065	2,366	1,027
<b>TOTAL REVENUES</b>	<b>\$577,314,457</b>	<b>\$355,633,008</b>	<b>\$152,460,877</b>	<b>\$31,570,213</b>	<b>\$37,650,360</b>
<b>OPERATING EXPENSES</b>					
COG & OTHER GAS SUPPLY EXP	377,921,183	218,738,278	113,029,695	19,900,362	26,252,849
O&M TOTAL EXPENSES EXCL COG	83,879,701	62,470,738	14,943,968	2,833,011	3,631,984
DEPRECIATION EXPENSE	36,973,767	28,167,964	5,484,849	1,335,232	1,985,722
TAXES OTHER THAN INCOME	8,595,580	6,557,772	1,321,857	296,938	419,013
STATE INCOME TAXES	2,943,138	1,670,437	743,967	303,161	225,573
FEDERAL INCOME TAXES	14,245,617	8,085,387	3,601,008	1,467,383	1,091,838
INVESTMENT TAX CREDIT (NET)	(1,449,706)	(1,086,839)	(221,226)	(57,481)	(84,160)
<b>TOTAL EXPENSES</b>	<b>\$523,109,280</b>	<b>\$324,603,737</b>	<b>\$138,904,118</b>	<b>\$26,078,605</b>	<b>\$33,522,819</b>
<b>OPERATING RETURN AFTER TAXES</b>	<b>\$54,205,177</b>	<b>\$31,029,270</b>	<b>\$13,556,759</b>	<b>\$5,491,607</b>	<b>\$4,127,540</b>
<b>RATE BASE</b>					
GROSS PLANT	1,147,500,277	860,276,559	175,109,186	45,498,211	66,616,320
RESERVES FOR DEPRECIATION	(414,361,078)	(309,197,079)	(64,256,520)	(16,975,514)	(23,931,965)
NET PLT IN SERVICE	733,139,199	551,079,481	110,852,667	28,522,697	42,684,355
WORKING CAPITAL	62,997,642	40,102,910	15,753,096	6,420,093	721,544
ACCUMULATED DEFERRED INCOME TAXES	(104,922,583)	(78,867,264)	(15,864,584)	(4,082,001)	(6,108,735)
<b>RATE BASE</b>	<b>\$691,214,258</b>	<b>\$512,315,127</b>	<b>\$110,741,179</b>	<b>\$30,860,788</b>	<b>\$37,297,164</b>
<b>RATE OF RETURN</b>	<b>7.84%</b>	<b>6.06%</b>	<b>12.24%</b>	<b>17.79%</b>	<b>11.07%</b>

**PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.**  
**DOCKET NO. G-5, SUB 495**  
**PRO FORMA COST OF SERVICE STUDY**  
**FOR THE TEST YEAR ENDED DECEMBER 31, 2007**

DESCRIPTION	TOTAL	RES	SGS	LGS FIRM	LGS INT
<b>OPERATING REVENUES</b>					
RATE SCHEDULE REVENUES	683,975,151	432,040,041	175,677,437	34,242,383	42,015,289
OTHER GAS REVENUES	3,345,175	2,829,536	512,246	2,366	1,027
<b>TOTAL REVENUES</b>	<b>\$687,320,326</b>	<b>\$434,869,578</b>	<b>\$176,189,684</b>	<b>\$34,244,749</b>	<b>\$42,016,315</b>
<b>OPERATING EXPENSES</b>					
COG & OTHER GAS SUPPLY EXP	476,879,987	287,040,425	135,895,210	22,531,972	31,412,381
O&M TOTAL EXPENSES EXCL COG	87,569,278	65,248,980	15,831,418	2,816,451	3,672,429
DEPRECIATION EXPENSE	37,555,784	28,814,772	5,512,473	1,300,020	1,928,518
TAXES OTHER THAN INCOME	9,344,472	7,126,229	1,453,881	314,115	450,247
STATE INCOME TAXES	3,798,385	2,331,863	874,799	364,095	227,628
FEDERAL INCOME TAXES	17,937,733	11,012,138	4,131,208	1,719,424	1,074,964
INVESTMENT TAX CREDIT (NET)	(830,678)	(622,756)	(126,762)	(32,936)	(48,224)
<b>TOTAL EXPENSES</b>	<b>\$632,254,961</b>	<b>\$400,951,652</b>	<b>\$163,572,227</b>	<b>\$29,013,140</b>	<b>\$38,717,942</b>
<b>OPERATING RETURN AFTER TAXES</b>	<b>\$55,065,365</b>	<b>\$33,917,926</b>	<b>\$12,617,457</b>	<b>\$5,231,609</b>	<b>\$3,298,373</b>
<b>RATE BASE</b>					
GROSS PLANT	1,191,285,225	900,424,781	179,317,430	45,325,089	66,217,926
RESERVES FOR DEPRECIATION	(427,817,811)	(319,648,075)	(66,196,433)	(17,406,701)	(24,566,602)
NET PLT IN SERVICE	763,467,414	580,776,706	113,120,996	27,918,387	41,651,324
WORKING CAPITAL	63,039,596	40,132,670	15,758,474	6,423,511	724,941
ACCUMULATED DEFERRED INCOME TAXES	(106,359,412)	(79,947,286)	(16,081,836)	(4,137,901)	(6,192,389)
<b>RATE BASE</b>	<b>\$720,147,598</b>	<b>\$540,962,090</b>	<b>\$112,797,634</b>	<b>\$30,203,997</b>	<b>\$36,183,877</b>
<b>RATE OF RETURN</b>	<b>7.65%</b>	<b>6.27%</b>	<b>11.19%</b>	<b>17.32%</b>	<b>9.12%</b>

**PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.**  
**DOCKET NO. G-5, SUB 495**  
**AFTER PROPOSED INCREASE COST OF SERVICE STUDY**  
**FOR THE TEST YEAR ENDED DECEMBER 31, 2007**

DESCRIPTION	TOTAL	RES	SGS	LGS FIRM	LGS INT
<b>OPERATING REVENUES</b>					
RATE SCHEDULE REVENUES	704,416,646	447,154,440	179,356,906	34,694,510	43,210,789
OTHER GAS REVENUES	3,345,175	2,829,536	512,246	2,366	1,027
<b>TOTAL REVENUES</b>	<b>\$707,761,821</b>	<b>\$449,983,977</b>	<b>\$179,869,153</b>	<b>\$34,696,876</b>	<b>\$43,211,815</b>
<b>OPERATING EXPENSES</b>					
COG & OTHER GAS SUPPLY EXP	476,879,987	287,040,425	135,895,210	22,531,972	31,412,381
O&M TOTAL EXPENSES EXCL COG	87,675,476	65,327,503	15,850,534	2,818,800	3,678,640
TAXES OTHER THAN INCOME	24,563,991	15,911,579	5,323,934	1,865,984	1,462,494
INVESTMENT TAX CREDIT (NET)	(830,678)	(622,756)	(126,762)	(32,936)	(48,224)
<b>TOTAL EXPENSES</b>	<b>\$640,390,553</b>	<b>\$406,967,092</b>	<b>\$165,036,634</b>	<b>\$29,193,084</b>	<b>\$39,193,744</b>
<b>OPERATING RETURN AFTER TAXES</b>	<b>\$67,371,268</b>	<b>\$43,016,885</b>	<b>\$14,832,520</b>	<b>\$5,503,792</b>	<b>\$4,018,071</b>
<b>RATE BASE</b>					
GROSS PLANT	1,191,285,225	900,424,781	179,317,430	45,325,089	66,217,926
RESERVES FOR DEPRECIATION	(427,817,811)	(319,648,075)	(66,196,433)	(17,406,701)	(24,566,602)
NET PLT IN SERVICE	763,467,414	580,776,706	113,120,996	27,918,387	41,651,324
WORKING CAPITAL	63,039,596	40,132,670	15,758,474	6,423,511	724,941
ACCUMULATED DEFERRED INCOME TAXES	(106,359,412)	(79,947,286)	(16,081,836)	(4,137,901)	(6,192,389)
<b>RATE BASE</b>	<b>\$720,147,598</b>	<b>\$540,962,090</b>	<b>\$112,797,634</b>	<b>\$30,203,997</b>	<b>\$36,183,877</b>
<b>RATE OF RETURN</b>	<b>9.36%</b>	<b>7.95%</b>	<b>13.15%</b>	<b>18.22%</b>	<b>11.10%</b>

**PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.**  
**SUMMARY OF ADJUSTED TEST YEAR REVENUE**  
**FOR THE TEST YEAR ENDED DECEMBER 31, 2007**  
**DOCKET NO. G-5, SUB 495**

RATE SCHEDULE	PER BOOK			ANNUALIZED			NORMALIZED		GROWTH ADJUSTED		
	BILLS	THERMS	AMOUNT	BILLS	THERMS	AMOUNT	THERMS	AMOUNT	BILLS	THERMS	AMOUNT
101 - Summer	2,410,818	34,439,257	-	2,410,818	34,439,257	\$69,305,228	39,082,337	\$75,398,667	2,512,314	40,727,711	\$78,572,966
101 - Winter	2,447,325	200,920,627	\$352,452,830	2,447,325	200,920,627	\$300,210,691	229,308,970	\$339,170,001	2,550,358	238,938,208	\$353,415,209
115 - Summer	41	15,886	\$20,600	41	15,886	\$21,258	15,886	\$21,258	41	15,886	\$21,258
115 - Winter	38	14,738	\$18,728	38	14,738	\$20,606	14,738	\$20,606	38	14,738	\$20,606
120	980	17,640	\$9,957	980	17,640	\$9,957	17,640	\$9,957	980	17,640	\$9,957
125	465,730	124,198,445	\$151,980,870	465,748	124,235,381	\$161,994,937	133,572,310	\$173,617,361	470,917	135,054,485	\$175,543,916
126	90	86,981	\$95,412	90	86,981	\$103,646	86,981	\$103,646	90	86,981	\$103,646
145	2,620	21,432,699	\$21,782,228	2,620	21,432,699	\$23,597,241	21,432,699	\$23,597,242	2,620	21,432,699	\$23,597,242
150	209	19,081,037	\$17,209,800	209	19,081,037	\$18,389,400	19,081,037	\$18,389,400	209	19,081,037	\$18,389,400
160 - Sales	71	10,062,649	\$7,691,802	71	10,062,649	\$9,664,586	10,062,649	\$9,664,586	71	10,062,649	\$9,664,586
160 - Transportation	6	1,535,279	\$64,816	6	1,535,279	\$109,101	1,535,279	\$109,101	6	1,535,279	\$109,101
175	2,810	72,088,196	\$9,568,158	2,810	72,088,196	\$10,457,633	72,088,196	\$10,457,633	2,810	72,088,196	\$10,457,633
180	2,067	176,862,616	\$12,190,080	2,067	176,862,616	\$13,451,136	176,862,616	\$13,451,136	2,067	176,862,616	\$13,451,136
190	6	14,844	\$11,338	0	0	\$0	0	\$0	0	0	\$0
195	12	22,092	\$18,587	0	0	\$0	0	\$0	0	0	\$0
200	12	20,860,195	\$492,834	12	20,860,195	\$401,035	20,860,195	\$401,035	12	20,860,195	\$401,035
201	12	12,081,154	\$217,461	12	12,081,154	\$217,461	12,081,154	\$217,461	12	12,081,154	\$217,461
<b>Total</b>	<b>5,332,847</b>	<b>693,734,335</b>	<b>\$573,825,501</b>	<b>5,332,847</b>	<b>693,734,335</b>	<b>\$607,953,915</b>	<b>736,102,687</b>	<b>\$664,629,089</b>	<b>5,542,545</b>	<b>748,859,474</b>	<b>\$683,975,151</b>
Other Operating Revenue			\$3,221,664								\$3,221,664
Unbilled Revenue			\$267,292								
Per Book and Proforma Revenue			<u>\$577,314,457</u>								<u>\$687,196,815</u>

Total Adjustment to Revenue

\$109,882,358

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
DOCKET NO. G-5, SUB 495  
CUSTOMER USAGE TRACKER ADJUSTMENT MECHANISM  
PROPOSED BASE LOAD, HSF AND R FACTORS

Paton Exhibit 9  
Page 1 of 3

DESCRIPTION	RATE SCHEDULE NO. 101 Residential Summer	RATE SCHEDULE NO. 101 Residential Winter	RATE SCHEDULE NO. 125 SGS First 500 Therms	RATE SCHEDULE NO. 125 SGS Next 4,500 Therms	RATE SCHEDULE NO. 125 SGS Over 5,000 Therms
*Clean* Rates (\$/Therm)	\$1.33011	\$1.39011	\$1.29230	\$1.22230	\$1.17230
Less:					
Commodity Cost of Gas	0.87500	0.87500	0.87500	0.87500	0.87500
LUAF & Co. Use Gas	0.00784	0.00784	0.00784	0.00784	0.00784
Gross Margin	\$0.44727	\$0.50727	\$0.40946	\$0.33946	\$0.28946
Less:					
Fixed Demand and Storage Rate	0.08226	0.14226	0.15573	0.08573	0.03573
R <sub>i</sub> Value (\$/Therm)	\$0.36501	\$0.36501	\$0.25373	\$0.25373	\$0.25373
Heat Sensitive Factor (Therms/HDD)	0.16651	0.16651	0.61089	0.61089	0.61089
Base Load Factor (Therms/Mo.)	8.53271	8.53271	115.15641	115.15641	115.15641

**PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.**  
**DOCKET NO. G-5, SUB 495**  
**CUSTOMER USAGE TRACKER ADJUSTMENT MECHANISM**  
**MONTHLY NORMAL DEGREE DAYS**

	<b><u>NDD</u></b>
January	724.084
February	583.065
March	448.837
April	201.387
May	61.333
June	5.502
July	0.229
August	0.093
September	21.253
October	186.939
November	419.112
December	690.849
<b>Total</b>	<b><u><u>3,342.68</u></u></b>

**PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.**  
**DOCKET NO. G-5, SUB 495**  
**CUSTOMER USAGE TRACKER ADJUSTMENT MECHANISM**  
**PROPOSED REPORTING FORMAT FOR:**  
**CALCULATION OF MONTHLY DEFERRED AMOUNT,**  
**BALANCE IN CUT DEFERRED ACCOUNT AND**  
**RATE INCREMENT/(DECREMENT)**

		Residential	SGS
		Rate Schedule	Rate Schedule
		No. 101	No. 125
Description	Formula		
1 Normal Degree Days			
2 Base Load (th/month)		8.53271	115.15641
3 Heat Sensitive Factor (th/HDD)		0.16651	0.61089
4 Usage/HDD/Customer (therms)	$((L1 \times L3) + L2)$		
<b>RATE CASE</b>			
5 Number of Customers (Actual)			
6 Total Normalized Usage (therms)	$(L4 \times L5)$		
7 R Factor (\$/therm)		\$0.36501	\$0.25373
8 Normalized Margin Revenue	$(L6 \times L7)$		
<b>ACTUAL</b>			
9 Number of Customers (Actual)			
10 Actual Usage (therms)			
11 R Factor (\$/therm)		\$0.36501	\$0.25373
12 Actual Margin Revenue	$(L10 \times L11)$		
13 CUT Deferred Account Adjustment	$(L8 - L12)$		
14 Current Month Increment/(Decrement) (\$/therm)			
15 Current Month (Collections)/Refunds	$(-L14 \times L10)$		
16 Beginning Balance in Deferred Account			
17 Current Month (Collections)/Refunds	$(L15)$		
18 Current Month Adjustment	$(L13)$		
19 Ending Balance Before Interest	$(L16 + L17 + L18)$		
20 Monthly Interest Rate			
21 Accrued Interest	$((L16 + L19) / 2) \times L20)$		
22 Ending Balance Due (To)/From Customers	$(L19 + L21)$		
23 Rate Case Volumes (therms)			
24 Increment/(Decrement) (\$/therm)	$(L22 / L23)$		
25 Current Month Increment/(Decrement) (\$/therm)	$(L14)$		
26 Adjustment to Increment/(Decrement) (\$/therm)	$(L24 - L25)$		





PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
PRO FORMA COST OF GAS  
FOR THE TEST YEAR ENDED DECEMBER 31, 2007  
DOCKET NO. G-5, SUB 495

Paton Exhibit 10  
2 of 2

FACILITY	RATE [\$/DT]	STORAGE QUANTITY	DAILY DEMAND	MONTHS/ DAYS	AMOUNT	SERVICE TOTAL
<b>TRANSCO</b>						
GSS						
DEMAND	\$0.10697		33,218	365	1,296,965	
CAPACITY	\$0.00061	1,835,944		365	408,773	1,705,738
WSS						
DEMAND	\$0.02353		32,877	365	282,362	
CAPACITY	\$0.00028	2,794,500		365	285,598	567,960
LG-A						
DEMAND	\$0.04899		5,175	365	92,536	
CAPACITY	\$0.00944	25,875		365	89,155	181,691
ESS						
DEMAND	\$0.01718		47,222	365	296,115	
CAPACITY	\$0.00172	475,111		365	298,275	594,390
Eminence						
DEMAND	\$0.01718		48,259	365	302,618	
CAPACITY	\$0.00172	480,603		365	301,723	604,340
<b>COLUMBIA FSS</b>						
DEMAND	\$1.5070		35,335	12	638,998	
CAPACITY	\$0.0290	3,180,150		12	1,106,692	1,745,690
<b>COVE POINT LNG</b>						
RESV CHG - FPS-1	\$3.5557		25,000	12	1,066,710	
RESV CHG - FTS	\$0.5662		25,000	12	169,860	1,236,570
<b>DTI GSS</b>						
DEMAND	\$1.8780		62,669	12	1,412,309	
CAPACITY	\$0.0145	3,856,000		12	670,944	2,083,253
<b>PINE NEEDLE LNG</b>						
RESV CHG	\$0.1140		103,500	365	4,308,146	4,308,146
<b>SALTVILLE</b>						
DEMAND	\$0.075083	600,000		12	540,598	
INJ RESERV	\$1.495000		13,333	12	239,194	
WD RESERV	\$0.751000		30,000	12	270,360	1,050,152
<b>TOTAL STORAGE</b>						<u>\$14,077,930</u>
<b>TOTAL DEMAND CHARGES</b>						<u>\$68,593,678</u>
<b>SALES VOLUMES</b>		465,432,034	\$0.8750			407,253,030
UNACCOUNTED FOR GAS		5,691,332	\$0.8750			4,979,916
COMPANY USE GAS		726,910	\$0.8750			636,046
PRO FORMA GAS COST						<u>481,462,670</u>
DEFERRED FIXED GAS COST, CO. USE & LUAF						<u>(4,582,684)</u>
TOTAL PRO FORMA GAS COST						<u>476,879,986</u>
GAS COST PER BOOKS						<u>377,921,183</u>
ADJUSTMENT TO GAS COST						<u>\$98,958,803</u>

**PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.**  
**DOCKET NO. G-5, SUB 495**  
**PROPOSED FIXED GAS COST RATES**

RATE SCHEDULE		FIXED GAS COST APPORTIONMENT	PROFORMA FIXED GAS COST	VOLUMES (THERMS)	FIXED GAS COST RATE (\$/THERM)
Total		100.0000%	\$60,565,386 3/	715,918,125	
101-Summer	1/	5.535%	\$3,352,294	40,752,417	\$0.08226
101-Winter	1/	56.129%	\$33,994,701	238,961,766	\$0.14226
125-Step 1		18.030%	\$10,911,483	70,068,860	\$0.15573
125-Step 2		8.687%	\$5,265,995	61,428,833	\$0.08573
125-Step 3	2/	0.209%	\$130,174	3,643,773	\$0.03573
145		3.087%	\$1,869,360	21,432,699	\$0.08722
150		0.849%	\$514,386	29,143,686	\$0.01765
175		2.541%	\$1,539,083	72,088,196	\$0.02135
180		4.934%	\$2,988,165	178,397,895	\$0.01675

1/ Includes Rate 115 volumes

2/ Includes Rate 126 volumes

3/ Proforma Fixed Gas Cost

Annualized Secondary Market Credits

Net Fixed Gas Costs to be Recovered

\$68,593,678

(8,028,292)

\$60,565,386

**PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.**  
**DOCKET NO. G-5, SUB 495**  
**PROPOSED COMPANY USE AND LOST AND UNACCOUNTED FOR RATES**

	Therms	\$/Therm	Amount	Throughput	\$/Therm
Unaccounted For Gas	5,691,332	\$0.8750	4,979,916	715,918,125	\$0.00696
Company Use Gas	726,910	\$0.8750	636,046	715,918,125	\$0.00089
			<u>\$5,615,962</u>		<u>\$0.00784</u>

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 495

PROPOSED REPORTING FORMAT FOR:

DEFERRAL AND RECOVERY OF CONSERVATION AND EFFICIENCY PROGRAM EXPENDITURES

	Description	Formula	Amount
1	Current Month Residential & SGS Sales		
2	Current Month Increment/(Decrement) (\$/therm)		
3	Current Month (Collections)/Refunds	$(L1 \times L2)$	
4	Beginning Balance in Deferred Account		
5	Current Month Expenses		
6	Current Month (Collections)/Refunds	$(L3)$	
7	Ending Balance Before Interest	$(L4 + L5 + L6)$	
8	Monthly Interest Rate		
9	Accrued Interest	$((L4 + L7) / 2) \times L8)$	
10	Ending Balance Due (To)/From Customers	$(L7 + L9)$	
11	Rate Case Volumes (therms)		
12	Increment/(Decrement) (\$/therm)	$(L10 / L11)$	
13	Current Month Increment/(Decrement) (\$/therm)	$(L2)$	
14	Adjustment to Increment/(Decrement) (\$/therm)	$(L12 - L13)$	

**PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC**  
**DOCKET NO. G-5, SUB 495.**  
**RESIDENTIAL RATE DIFFERENTIAL DEFERRAL**  
**TEMPORARY INCREMENT**

	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08
Beginning Balance	\$0	\$29,714	\$70,203	\$108,283	\$144,262	\$201,507	\$355,838	\$358,117	\$360,410
Deferral	\$29,622	\$40,170	\$37,510	\$35,199	\$56,141	\$152,609			
Balance:	\$29,622	\$69,884	\$107,713	\$143,482	\$200,403	\$354,116	\$355,838	\$358,117	\$360,410
Interest	\$92	\$319	\$570	\$780	\$1,104	\$1,722	\$2,279	\$2,293	\$2,159
Ending Balance:	\$29,714	\$70,203	\$108,283	\$144,262	\$201,507	\$355,838	\$358,117	\$360,410	\$362,569
Interest Rate	0.0061973	0.0064038	0.0064038	0.0061973	0.006403836	0.0061973	0.0064038	0.0064038	0.0059907

	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08
Beginning Balance	\$362,569	\$364,891	\$367,152	\$369,503	\$371,793	\$374,174	\$376,570	\$378,904
Interest	\$2,322	\$2,261	\$2,351	\$2,290	\$2,381	\$2,396	\$2,334	\$2,426
Ending Balance:	\$364,891	\$367,152	\$369,503	\$371,793	\$374,174	\$376,570	\$378,904	\$381,330
Interest Rate	0.0064038	0.0061973	0.0064038	0.0061973	0.006403836	0.0064038	0.0061973	0.0064038

Annualized Residential Sales Volumes 279,665,919

Proposed Temporary Increment (\$/therm) \$0.00136