

# OFFICIAL COPY

1 PLACE: Dobbs Building, Raleigh, North Carolina

2 DATE: Tuesday, August 26, 2008

3 DOCKET NO.: G-5, Sub 495

4 TIME IN SESSION: 9:30 a.m. - 12:30 p.m.

5 BEFORE: Commissioner Lorinzo L. Joyner, Presiding  
6 Chairman Edward S. Finley, Jr.  
7 Commissioner Robert. V. Owens, Jr.  
8 Commissioner Sam. J. Ervin, IV  
9 Commissioner Howard N. Lee  
10 Commissioner William T. Culpepper, III

9 IN THE MATTER OF

10 Public Service Company Of NC, INC. Application for a  
11 General Increase in its Rates and Charges.

12  
13 A P P E A R A N C E S:

14 PUBLIC SERVICE NORTH CAROLINA

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1 USING AND CONSUMING PUBLIC

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1           COMMISSIONER JOYNER: Good morning, again. I am  
2 Lorinzo Joyner. With me today are Chairman Edward S.  
3 Finley; and Commissioners Robert V. Owens, Jr; Sam J.  
4 Ervin, IV; Howard N. Lee; and William T. Culpepper, III.

5           I now call for hearing Docket No. G-5, Sub 495,  
6 wherein Public Service Company of North Carolina, Inc.,  
7 doing business as PSNC Energy, has applied for an  
8 adjustment in its retail rates and charges.

9           On February 27, 2008, PSNC filed a letter with  
10 the Commission providing notice of its intent to file an  
11 Application for a general rate increase.

12 The Application was filed on March 31, 2008. PSNC also  
13 filed the testimony of the following PSNC witnesses: D.  
14 Russell Harris, Jimmy E Addison, Donald A. Murray, Julius  
15 A. Wright, Sharon Boone, and Candace A. Paton.

16           PSNC has requested approval of various changes  
17 to its rates, terms and conditions of service. The  
18 Company is requesting an increase of \$20,441,501 in  
19 revenue from its rates and charges for natural gas  
20 service; certain changes to the cost allocations and rate  
21 designs underlying existing rates for the Company; certain  
22 revisions to its current tariff; amortization of certain  
23 deferred account balances; approval to implement a  
24 customer usage tracker; and approval to implement a cost

1 recovery mechanism for customer conservation programs.

2           The increase in annual revenues of \$20,441,501  
3 requested by the Company represents an annual increase of  
4 3 percent over present rates. Several parties have  
5 intervened in this case. Carolina Utility Customers  
6 Association, Inc. filed a Petition to intervene on March  
7 10, 2008. CUCA's petition was granted by Order entered  
8 March 11, 2008. A petition to intervene filed Texican  
9 Horizon Energy Marketing, LLC, was granted on July 18,  
10 2008.

11           The Attorney General filed a Notice of  
12 Intervention in this matter on March 12, 2008, which is  
13 recognized pursuant to G.S.62-20.

14           The intervention and participation of the Public  
15 Staff of the North Carolina Utilities Commission is  
16 recognized pursuant to G.S. 62-15(d) and Commission Rule  
17 R1-19(e).

18           On April 30, 2008, the Commission entered a  
19 procedural Order in this case which scheduled an  
20 investigation and hearing, suspended proposed rates for  
21 270 days from the requested implementation date of May 1,  
22 2008, established the deadline for filing petitions to  
23 intervene, established testimony due dates and discovery  
24 guidelines and required public notice.

1           On June 25, 2008, PSNC caused to be filed  
2 Affidavits of publication indicating that notice has been  
3 given in accordance with the Commission's April 30, 2008  
4 procedural Order. On July 8, 2008, pursuant to a Motion  
5 filed by PSNC, the Commission issued an Order granting  
6 Motion for B. Craig Collins' admission Pro Hac Vice.

7           On July 30, 2008, the Public Staff filed a  
8 Motion for Extension of Time to File Testimony. On August  
9 4, 2008, the Commission filed an Order Granting Extension  
10 of Time.

11           On August 7, 2008, the Attorney General filed a  
12 Response to the Public Staff's Motion for Extension of  
13 Time to File Testimony. On August 8, 2008, the Public  
14 Staff filed a second Motion for Extension of Time to File  
15 Testimony. The Commission issued Order Granting Extension  
16 of Time on August 8, 2008.

17           On August 13, 2008, the Attorney General's  
18 Office filed the testimony and exhibits of Roger D.  
19 Colton. Also on August 13, 2008, PSNC, CUCA and the  
20 Public Staff filed a Stipulation. Corrections to exhibits  
21 filed in this Stipulation were filed August 22, 2008.

22           On August 15, 2008, PSNC filed Supplemental testimony and  
23 exhibits of Candace A. Paton.

24           On August 20, 2008, PSNC filed its witness list

1 and asked that the prefiled testimony and exhibits its  
2 witnesses D. Russell Harris, Sharon D. Boone, and Dr.  
3 Donald R. Murry be admitted into evidence and that said  
4 witnesses be excused from appearing to testify since the  
5 other parties had no cross examination questions.

6 Also on August 20, 2008, the Attorney General  
7 filed a letter asking that the prefiled testimony and  
8 exhibits of its witness Roger D. Colton be admitted into  
9 evidence, on the basis the agreement of the parties.

10 On August 22, 2008, the Commission issued an  
11 Order Granting Motion to Excuse Witnesses wherein PSNC  
12 witnesses Harris, Boone, and Murry, and Attorney General  
13 witness Colton were excused from attending the hearing and  
14 the prefiled testimony of each such witness was ordered to  
15 be copied into the record by stipulation of the parties.

16 In compliance with the requirements of the State  
17 Government Ethics Act, I remind all members of the  
18 Commission of their duty to avoid conflicts of interest  
19 and inquire whether any member has any known conflict with  
20 respect to the matters coming before the Commission at  
21 this time.

22 (No response.)

23 I now call for the appearances of counsel  
24 beginning with the Company.

1 MS. GRIGG: Good morning, Commissioner Joyner,  
2 Members of the Commission, I'm Mary Lynn Grigg with the  
3 law firm of Womble, Carlyle, Sandridge and Rice appearing  
4 on behalf of the Applicant, PSNC. Also appearing on  
5 behalf of the Company are Mr. Craig Collins, Assistant  
6 General Counsel; and Mr. Bill Pittman with the Pittman law  
7 firm.

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

11 MR. PAGE: I'm Bob Page with the Crisp, Page and  
12 Currin law firm appearing on behalf of the Intervener,  
13 Carolina Utility Customers Association.

14 MS. FORCE: Good morning. My name is Margaret  
15 Force. I'm with the Attorney General's office  
16 representing the Using and Consuming Public. And  
17 assisting me today is Mr. Bill Cornett. He will be -- he  
18 is a third-year law student at Elon, and he is going to be  
19 helping with distributing materials.

20 COMMISSIONER JOYNER: Mr. Cornett, welcome to  
21 State Government and to Commission proceedings. And good  
22 luck on your last year of law school.

23 Are there any preliminary matters we need to  
24 address before we proceed with the case in chief?

1 MS. GRIGG: Yes, ma'am. Thank you. We  
2 originally proposed in our witness hearing list, which we  
3 filed on April 20th, to call Ms. Paton and Dr. Wright to  
4 the stand as a panel and have Mr. Addison available for  
5 any subsequent question from the Commission or Ms. Force  
6 may have. We understand from Ms. Force that she has  
7 questions on the Customer Usage Tracker. All three of the  
8 witnesses have testified in some manner on the tracker.  
9 Therefore, we proposed in the interest of expediency and  
10 if the Commission is admittable, to call all three  
11 witnesses, Ms. Paton, Dr. Wright and Mr. Addison, to the  
12 stand and have them available on their direct testimony,  
13 as well as Ms. Paton's Supplemental Testimony to answer  
14 any questions of Ms. Force and the Commission.

15 COMMISSIONER JOYNER: I'm prepared to rule, but  
16 Ms. Force, I will also hear you if you wish to be heard.

17 MS. FORCE: I have no objection.

18 COMMISSIONER JOYNER: Without objection that  
19 Motion is allowed. We will proceed with the panel as you  
20 indicated.

21 MS. GRIGG: Thank you.

22 COMMISSIONER JOYNER: Are there any other  
23 matters?

24 MS. FORCE: Before we proceed, I'd like to ask



1 if I could make a brief statement? I promise it will be  
2 short, that just identifies the issue for the Attorney  
3 General.

4 COMMISSIONER JOYNER: Is this in the nature of  
5 an opening statement?

6 MS. FORCE: It is although it's in outline form.  
7 I don't intend to present -- it's just presenting an  
8 outline and stating what the statute is that applies.

9 COMMISSIONER JOYNER: I will hear from the other  
10 parties as to their response to Ms. Forces' request; and  
11 as to whether or not any of the other parties wish to be  
12 heard similarly.

13 MS. GRIGG: Thank you, Commissioner Joyner. We  
14 have no objection if Ms. Force is going to make an opening  
15 statement as long as it doesn't take the form of  
16 testimony.

17 MR. PAGE: No objection.

18 MS. HOLT: No objection.

19 COMMISSIONER JOYNER: Okay. And I'm sure Ms.  
20 Force would not want to be testifying.

21 MS. FORCE: No. You may hold me to that.

22 COMMISSIONER JOYNER: All right. Is there  
23 anything else before we hear from Ms. Force?

24 (No response.)

1 All right. Ms. Force?

2 MS. FORCE: Thank you. I just want to make this  
3 brief opening because the primary issue as Ms. Grigg has  
4 said for the Attorney General's office is the Customer  
5 Usage Tracker. This statute that applies in this case is  
6 a new one. It's NC G.S. 62-133.7. It states that the  
7 Commission may allow a rate mechanism that adjusts  
8 residential and commercial rates for changes in  
9 consumption but only upon findings by the Commission, 1.  
10 that the mechanism is appropriate to track and true-up  
11 variations in average per customer usage by rate schedule  
12 from levels adopted in the general rate case proceeding;  
13 and 2. that the mechanism is in the public interest.

14 And the Attorney General has indicated in the  
15 past and is providing reasons today why that provision of  
16 the Stipulation is one that it opposes. In other  
17 respects, the Attorney General's office doesn't object to  
18 the Stipulation.

19 I do have a brief -- an outline that identifies  
20 what the issues are, but I can present that at the  
21 beginning of the witness testimony so that it gives you  
22 the list of what we will go through. That concludes my  
23 opening.

24 COMMISSIONER JOYNER: Okay. I'm not sure I am

1 clear with respect to your last comment about the outline  
2 and the presentation. You have a written outline.

3 MS. FORCE: I have an outline, and I can run  
4 through what those items be and say it here, but I could  
5 pass it out, either one, so that you have it in front of  
6 you. As we go through the questions, it just gives you a  
7 sense of the direction of the cross-examination.

8 COMMISSIONER JOYNER: And you'll be using that  
9 during your cross-examination of the witnesses; is that  
10 what I understand?

11 MS. FORCE: Yes. They are bullet points, so  
12 they are not going to -- Actually, why don't I just run  
13 through it because that would be more useful. The  
14 questions that we will be addressing concern the public  
15 interest concerns and the design of the mechanism; how the  
16 cut affects risks for public services; shareholder and its  
17 customers; revenue stability for public service versus  
18 rate stability for customers; rate increases without  
19 scrutiny or caps or periodic review; whether the mechanism  
20 is revenue neutral or it will increase rates in order to  
21 increase revenues; declining per customer consumption  
22 versus increasing total consumption from growth; whether  
23 the mechanism is justified by the energy conservation  
24 proposal; extent to which the CUT is justified as an

1 alternative to full or increased recovery of margin and  
2 the facilities charge; unintended consequences that may  
3 occur from the change in rate design incentives; lessons  
4 learned from the Piedmont experiment; the CUT and rate of  
5 return in the Stipulation and the true-up formulas -- some  
6 concerns about that.

7 I can pass that out. You may say that that's  
8 argumentative, but I think that's basically an outline of  
9 where we will go with our questioning.

10 MS. GRIGG: I'd object to that, Commissioner  
11 Joyner. It sounds almost as if it's a witness -- I mean,  
12 as an exhibit or makes argumentative, making position on  
13 the Company's case. So we don't object to Ms. Force  
14 asking questions on those topics, but we prefer it not  
15 come into evidence.

16 COMMISSIONER JOYNER: We are going to treat --  
17 I'm going to rule that Ms. Force's comments will be  
18 treated in the nature of an opening statement. They  
19 clearly are not evidence, and the Commission would not  
20 entertain them as such. And, again, in light of my ruling  
21 on that objection, I am perfectly happy to re-extend to  
22 you the invitation to make an opening if you desire.

23 MS. GRIGG: No, ma'am.

24 COMMISSIONER JOYNER: Okay. Is there anything

1 else?

2 (No response.)

3 Then, Ms. Grigg, you may call your panel of  
4 witnesses.

5 MS. GRIGG: Thank you, Commissioner Joyner. I  
6 call to the stand Mr. Addison, Dr. Wright and Ms. Paton.  
7 And I will introduce Mr. Addison first, followed by Dr.  
8 Wright and then Ms. Paton.

9 JIMMY ADDISON  
10 DR. JULIUS WRIGHT  
CANDACE PATON; Being first duly sworn,  
11 testified as follows:

12 DIRECT EXAMINATION BY MS. GRIGG:

13 Q Good morning, Mr. Addison.

14 A Good morning.

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

17 A My name is Jimmy Addison. My address is 1426 Main  
18 Street, Columbia, South Carolina.

19 Q By whom are you employed, and in what capacity?

20 A I am employed by SCANA Corporation as Senior Vice  
21 President and Chief Financial Officer of both the parent  
22 company and of all subsidiaries including PSNC Energy.

23 Q Did you cause to be prefiled in this docket on or  
24 about March 31, 2008, Direct Testimony in question and

1 answer form consisting of 8 pages?

2 A I did.

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

5 A There are none.

6 Q If I asked you the questions today in the prefiled  
7 testimony, would your answers be the same?

8 A They would.

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

12 COMMISSIONER JOYNER: Without objection that is  
13 allowed.

14 (Whereupon, the Prefiled Direct Testimony  
15 of Jimmy Addison was copied into the record  
16 as if given orally from the stand.)

17 MS. GRIGG: Thank you.

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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.

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

3 A I have.

4 Q Could you please read it to the Commission at this  
5 time?

6 A Summary read into the record.

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DOCKET NO. G-5, SUB 495  
Summary of  
Direct Testimony of Jimmy E. Addison

The purpose of my testimony is to provide an overview of the financial status of PSNC Energy as it relates to the decision to seek rate relief in this case, the perspective of the financial community on the Company and to support the requested return on equity.

The number of residential customers PSNC serves has grown by approximately 8% since the last rate case. To keep pace with this growth, the Company has made significant investments in our system, in addition to necessary upgrades and repairs to facilities reaching the end of their useful lives. The cost of capital associated with the 19% increase in rate base over two years is a principal factor driving the request for a rate increase at this time. On an adjusted test-year basis, the Company's overall rate of return was 7.65% at the time we filed the Application, which translates into a return on equity of 8.82%.

As chief financial officer for PSNC I am principally responsible for managing PSNC's relationships with investors, analysts and debt-rating agencies. The investment community understands that businesses such as PSNC with high exposure to changing capital markets, increasing capital demands and operating costs, volatile gas supplies and costs, and the overall economic uncertainty bear substantial risk. The Company made its request for a rate increase to support the financial integrity of PSNC and its continued ability to access national capital markets on reasonable terms in this time of increasing financial uncertainty.



1 MS. GRIGG: At this time, Commissioner Joyner,  
2 I'd like to go ahead and introduce Dr. Wright and then I  
3 will move all their exhibits.

4 COMMISSIONER JOYNER: Proceed.

5 MS. GRIGG: Thank you.

6 continued DIRECT EXAMINATION BY MS. GRIGG:

7 Q Good morning, Dr. Wright.

8 A Good morning.

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

11 A Julius A. Wright.

12 Q With whom are you employed, and in what capacity?

13 A I'm the President of J.A. Wright & Associates.

14 Q Did you cause to be prefiled in this docket on or  
15 about March 31, 2008, Direct Testimony in question and  
16 answer form consisting of 14 pages?

17 A Yes, I did.

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

20 A No, there are not.

21 Q If I asked you today the questions in your  
22 prefiled testimony, would your answers be the same?

23 A Yes, they would.

24 MS. GRIGG: Madam Chair, I ask that Dr. Wright's

1 testimony be copied into the record as if given orally  
2 from the stand.

3 COMMISSIONER JOYNER: That is allowed without  
4 objection.

5 (Whereupon, the Prefiled Direct Testimony  
6 of Julius A. Wright was copied into the  
7 record as if given orally from the stand.)

8 MS. GRIGG: Thank you.

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## **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.



1 Q Dr. Wright, have you prepared a summary of your  
2 testimony?

3 A Yes, I have.

4 Q Would you please read it to the Commission at this  
5 time?

6 A Yes. (Summary read into the record.)  
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DOCKET NO. G-5, SUB 495  
Summary of  
Direct Testimony of  
Julius A. Wright, Ph.D.

The purpose of my testimony is to address two issues: the policy perspective related to the decoupling of rates or revenues in conjunction with the Company's proposed semi-annual rate adjustment mechanism, also referred to as a Customer Usage Tracker or CUT; and the Company's proposed customer conservation initiatives.

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

The Company is proposing four initiatives regarding conservation. The first is a communications program that will educate its customers and encourage conservation. The second is an in-home energy audit program, which would provide for weatherization and conservation measures to be installed at the time of the visit. The third is an energy efficient equipment rebate program. The fourth involves discount rates for residential homes and commercial buildings that meet certain energy efficiency standards. The Stipulation includes a level of recovery for conservation program expenditures and provides that the Company will file the programs with this Commission for approval within 30 days of the order in this proceeding.

1 MS. GRIGG: Thank you, Dr. Wright.

2 continued DIRECT EXAMINATION BY MS. GRIGG:

3 Q Ms. Paton, good morning.

4 A Good morning.

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

7 A My name is Candace A. Paton. My business address  
8 is 800 Gaston Road, Gastonia, North Carolina.

9 Q With whom are you employed, and in what capacity?

10 A I am employed by SCANA services as Rates and  
11 Regulatory Manager for Public Service Company.

12 Q Did you cause to be prefiled in this docket on or  
13 about March 31, 2008, Direct Testimony in question and  
14 answer form consisting of 13 pages and 14 exhibits?

15 A Yes, I did.

16 Q Did you also cause to be filed 6 pages of  
17 Supplemental Testimony and 1 exhibit on August 15th -- 3  
18 exhibits?

19 A Three exhibits, yes, I did.

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

22 A No, there are not.

23 Q If I asked you today the questions in your  
24 Prefiled Direct and Supplemental Testimony, would your

1     answers be the same?

2     A           Yes, they would.

3               MS. GRIGG:  Madam Chair, I ask that Ms. Paton's  
4     testimony, both Direct and Supplemental, be copied into  
5     the record as though given orally from the stand.

6               COMMISSIONER JOYNER:  That Motion is allowed.

7               MS. GRIGG:  Thank you.

8               (Whereupon, the Direct and Supplemental  
9     Testimony of Candace Paton was copied into  
10    the record as if given orally from the  
11    stand.)

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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  
18           POOLING 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.

1 Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND CURRENT POSITION  
2 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" or "the Company"). My business address is 800 Gaston Road, Gastonia,  
6 North Carolina 28056.

7 Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

8 A. Yes. I pre-filed direct testimony in this proceeding on March 31, 2008.

9 Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY?

10 A. To address and support the various adjustments reflected in the Stipulation filed in this  
11 proceeding on August 13, 2008, as well as the changes to PSNC's rates, tariff and service  
12 regulations adopted therein.

13 Q. PLEASE DESCRIBE THE EVENTS WHICH LEAD TO THE FILING OF A  
14 STIPULATION IN THIS PROCEEDING.

15 A. Subsequent to the filing of the Company's Application in this docket, the Public Staff,  
16 Carolina Utility Customers Association, Inc. ("CUCA") and the Attorney General engaged  
17 in substantial discovery regarding the matters contained therein. Additionally, the Public  
18 Staff spent several days in both Gastonia and Columbia performing on-site audits and  
19 interviewing various Company personnel. Subsequent to the investigative portion of the  
20 proceeding, representatives of PSNC, the Public Staff and CUCA met to see if an  
21 agreement satisfactory to all parties could be reached.

22 Q. WHAT WAS THE OUTCOME OF THE NEGOTIATIONS?

1 A. The agreement set forth in the Stipulation and accompanying exhibits was the result of the  
2 give-and-take negotiations in which each stipulating party made substantial compromises  
3 on various issues in order to obtain an agreement on all issues. In the end, each stipulating  
4 party believes that the results reached, in the aggregate, are fair to customers and the  
5 Company.

6 Q. PLEASE SUMMARIZE THE EFFECT OF THE AGREEMENT ON PSNC'S  
7 REQUESTED REVENUE INCREASE.

8 A. The stipulating parties agreed that the Company should be authorized to increase its annual  
9 level of margin through the rates and charges approved in this case by \$9,104,984, offset  
10 by \$8,376,707 of reductions in fixed gas costs, for a net annual increase in rates and  
11 charges of \$728,277. The net effect of the agreed upon adjustments is reflected on  
12 Supplemental Paton Exhibit 1.

13 Q. PLEASE DISCUSS THE ADJUSTMENTS TO THE COMPANY'S REQUESTED  
14 REVENUE INCREASE REFLECTED ON SUPPLEMENTAL PATON EXHIBIT 1.

15 A. As shown on Line 1, the Company requested an overall increase in margin revenues of  
16 \$20,441,501. The determination of this amount was presented on Boone Exhibit 6, filed in  
17 this docket on March 31, 2008. The adjustments presented on Lines 2 through 10, and  
18 discussed below, resulted in an agreed to revenue increase of \$728,277.

19 *Line 2 - Change in Overall Rate of Return.* In PSNC's initial filing, the Company proposed  
20 a return on common equity of 12% and a capital structure of 53.75% equity, 35.89% long-  
21 term debt and 10.36% short-term debt, and a proposed overall rate of return of 9.36%. As a  
22 result of the negotiations, the Company agreed to a substantial reduction in the requested

1 return on common equity. The stipulated return on common equity is lower than what the  
 2 Company would otherwise have agreed to had the stipulating parties not agreed, among  
 3 other considerations, to the implementation of the Company's proposed Customer Usage  
 4 Tracker ("CUT") mechanism. Ultimately, the stipulating parties agreed to an overall rate  
 5 of return of 8.54% determined as follows:

<u>Item</u>	<u>Ratio</u>	<u>Cost Rate</u>	<u>Return</u>
Long-term debt	35.50%	6.96%	2.47%
Short-term debt	10.50%	3.25%	0.34%
Common equity	<u>54.00%</u>	10.60%	<u>5.73%</u>
Total	<u>100.00%</u>		<u>8.54%</u>

11 *Line 3 - Update Plant in Service and Other Rate Base Items at June 30, 2008.* In its  
 12 Application, the Company updated plant in service for estimated net additions through June  
 13 30, 2008. The Company also reflected estimated June 30, 2008 balances for various other  
 14 rate base items. The adjustment agreed to in the Stipulation reflects actual rather than  
 15 estimated June 30<sup>th</sup> balances.

16 *Line 4 – Reflect Current Fixed Gas Cost Rates.* In its application the Company reflected  
 17 fixed gas cost expense using the currently effective pipeline and storage facility rates. The  
 18 fixed gas cost expense reflected in the Stipulation reflects rate changes that have taken  
 19 place since that time. Additionally, fixed gas costs were reduced by a pro-forma amount of  
 20 secondary market credits.

21 *Line 5 - Payroll and Related Expenses.* This adjustment reflects changes in the Company's  
 22 actual level of payroll costs subsequent to the filing of its Application as well as certain

1 adjustments agreed to by the stipulating parties.

2 *Line 6 - Various O&M Expense Adjustments.* The Public Staff recommended adjustments  
3 to various O&M expense items that reduced the Company's revenue requirement. For  
4 purposes of settlement, the stipulating parties agreed to compromise positions on various  
5 adjustments which resulted in a total decrease in revenue requirement of \$1,121,174.

6 *Line 7 - Conservation Programs.* In its Application the Company proposed four  
7 conservation initiatives: 1) communications program, 2) in-home energy audit program, 3)  
8 energy-efficient equipment rebate program and 4) residential and commercial high-  
9 efficiency rates. The Company proposed to defer, track and true-up actual program  
10 expenses for the first three programs and proposed to recover the rate discount associated  
11 with the fourth program through the fixed gas cost true-up. For purposes of settlement, the  
12 stipulating parties agreed to include \$750,000 in the cost of service in this proceeding for  
13 costs associated with these programs. Additionally, the Company is to file the proposed  
14 programs for Commission approval within 30 days of issuance of the order in this  
15 proceeding.

16 *Line 8 - MGP Costs - Update Balance and Amortize Over 3 Years.* This adjustment  
17 updated the balance of deferred manufactured gas plant remediation costs to be amortized  
18 to reflect actual rather than estimated expenditures as of June 30, 2008.

19 *Line 9 - PIM Costs - Amortize Actual Deferred Expenses at June 30, 2008 Over 3 Years.*  
20 This adjustment updated the balance of deferred pipeline integrity management costs to be  
21 amortized to reflect actual rather than estimated expenditures as of June 30, 2008. In  
22 addition, the stipulating parties agreed that it is appropriate for the Company to continue

1 regulatory asset treatment of costs paid for services provided by independent contractors  
2 and outside consultants, until the resolution of PSNC's next general rate case proceeding.

3 Q. WHAT ARE THE TOTAL ADJUSTMENTS TO THE COMPANY'S REQUESTED  
4 REVENUE INCREASE OF \$20,441,501 REFLECTED ON SUPPLEMENTAL PATON  
5 EXHIBIT 1?

6 A. The adjustments listed above, plus rounding of \$2, total \$19,713,224, which reduces the  
7 requested revenue increase to \$728,277.

8 Q. ARE THERE ANY OTHER ISSUES ADDRESSED IN THE STIPULATION?

9 A. Yes. Paragraph 7 of the Stipulation addresses the residential rate differential deferral  
10 established in Docket No. G-5, Sub 481. The stipulating parties have agreed that an  
11 increment of \$0.00136 per therm, applicable to Rate 101, should be established as shown  
12 on Supplemental Paton Exhibit 2.

13 As discussed in paragraph 9 of the Stipulation, the stipulating parties agreed that it is  
14 appropriate to implement the Company's proposed CUT mechanism in the form of Rider C  
15 to the Company's tariffs. As a consequence of the implementation of the CUT, the  
16 stipulating parties agree that it is appropriate to eliminate the Weather Normalization  
17 Adjustment mechanism in the Company's tariffs. Exhibit D to the Stipulation presents the  
18 base load, heat sensitive and R<sub>i</sub> factors to be used in calculating amounts to be recorded in  
19 the Customer Usage Deferred Account as provided for in Rider C. The normal degree days  
20 to be used in the calculation are set forth on Paton Exhibit 9, page 3 of 3.

21 Q. IN YOUR OPINION DO THE COST OF SERVICE SETTLEMENT REFLECTED ON  
22 SUPPLEMENTAL PATON EXHIBIT 1, AND THE RESULTING RATES AND

1 CHARGES REFLECTED ON EXHIBIT B ATTACHED TO THE STIPULATION,  
2 REFLECT A FAIR, JUST AND REASONABLE RESOLUTION OF THIS CASE?

3 A. Yes. The agreed upon margin increase of \$9,104,984 represents what the stipulating  
4 parties agree is fair to the Company and its customers. In addition, the stipulating parties  
5 agree that the rates reflected on Exhibit B attached to the Stipulation are just and reasonable  
6 and reflect a fair and reasonable allocation of cost responsibility to the various customer  
7 classes. Supplemental Paton Exhibit 3 presents the impact on each rate schedule of the  
8 agreed upon net revenue increase of \$728,277.

9 Q. PLEASE SUMMARIZE.

10 A. The Stipulation is the result of negotiations among the stipulating parties who, collectively,  
11 represent each segment of PSNC's customer base impacted by this rate case. It would not  
12 be consistent with the agreement of the stipulating parties for the Commission to accept  
13 certain provisions of the Stipulation while rejecting others. In summary, I respectfully  
14 request that the Commission adopt the Stipulation and approve the matters set forth therein.

15 Q. DOES THIS COMPLETE YOUR SUPPLEMENTAL TESTIMONY?

16 A. Yes, it does.

1 Q Ms. Paton, have you prepared a summary of your  
2 Supplemental Testimony?

3 A Yes, I have.

4 Q Would you please read it to the Commission at this  
5 time?

6 A Yes. (Summary was read into the record.)  
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DOCKET NO. G-5, SUB 495  
Summary of  
Supplemental Testimony of  
Candace A. Paton

The purpose of my supplemental testimony is to present and support the Stipulation agreement entered into by PSNC Energy, the Public Staff and Carolina Utility Customers Association. The Stipulation represents a comprehensive and complete settlement of all issues in this case among all parties except the Attorney General.

As shown on Exhibit A attached to the Stipulation, the overall fair rate of return that the Company should be allowed an opportunity to earn on its rate base is 8.54%. The parties agreed that PSNC should be authorized to increase its annual level of margin through the rates and charges approved in this case by \$9,104,984, offset by \$8,376,707 of reductions in fixed gas costs, for a net annual increase in rates and charges of \$728,277. This represents an overall increase of approximately 0.11%.

The parties agreed that it is appropriate to implement the Company's proposed Customer Usage Tracker or CUT. The CUT mechanism is set forth in Rider C to the Company's tariff that was included in Exhibit E attached to the Stipulation. The CUT mechanism is applicable to residential customers on Rate 101 and small general service customers on Rate 125.

The parties further agreed that it is appropriate to implement a temporary rate increment of \$0.00136 per therm applicable to residential customers in order for the Company to recover the residential rate differential deferral authorized by the Commission in Docket No. G-5, Sub 481.

In its Application the Company proposed four conservation initiatives. For purposes of settlement, the Parties agreed to include \$750,000 in the cost of service in this proceeding for costs associated with these programs.

The Stipulation is the result of negotiations among the stipulating parties who, collectively, represent each segment of the Company's customer base impacted by this case. It is my opinion that the settlement reached reflects a fair and reasonable resolution of the matter. I, therefore, respectfully request that the Commission adopt the Stipulation and approve the settlement contained therein.

1 MS. GRIGG: Thank you. Commisisoner Joyner, we  
2 would like to move admission into evidence the exhibits  
3 attached to Ms. Paton's Direct Testimony as they were  
4 revised and the exhibits to her Supplemental Testimony.

5 COMMISSIONER JOYNER: Without objection that is  
6 allowed. They are admitted.

7 (Whereupon, Paton's Exhibits 1-14 are  
8 admitted into the record. And Paton's  
9 Supplemental Exhibits 1-3 are admitted into  
10 the record.)

11 MS. GRIGG: Thank you. And before tendering the  
12 witnesses for cross-examination, just in order,  
13 procedurally to move this along, we request that the  
14 testimony and exhibits of three Company witnesses who have  
15 been excused, D. Russell Harris, Sharon D. Boone, and  
16 Donald R. Murray be entered into the record as if given  
17 orally from the stand, and that their exhibits be admitted  
18 into evidence.

19 COMMISSIONER JOYNER: Okay. If the Order we  
20 issued didn't make that clear, I will allow the admission  
21 into evidence of the Prefiled Testimony of those witnesses  
22 and the exhibits as premarked.

23 (Whereupon, the testimony of Harris, Boone  
24 and Murray was copied into the record as if

given orally from the stand.)

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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.

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.

**I. POSITION AND QUALIFICATIONS**

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 IV. UTILITY REGULATION

15  
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.

**V. ECONOMIC ENVIRONMENT**

1

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.

22

**VI. SELECTION OF COMPARABLE COMPANIES**

1  
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.  
23

**VII. CAPITAL STRUCTURE**

1

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

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

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

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

20 Q. WHAT ARE THE CONSEQUENCES OF INCLUDING SHORT-TERM DEBT IN  
21 PSNC ENERGY'S CAPITAL STRUCTURE IF IT DOES NOT, IN FACT,  
22 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.

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

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

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

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

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

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

**X. FINANCIAL RISK**

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

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

**XL BUSINESS RISK**

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

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

10 Q. CAN YOU EXPLAIN IN MORE DETAIL THE POTENTIAL SOURCES OF  
11 BUSINESS RISKS TO LDCS?

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

19 Q. DO YOU BELIEVE THE BUSINESS RISKS FACING LDCS HAVE INCREASED  
20 RECENTLY?

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

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

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

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

11

12                                   **XII. FINANCIAL STATISTICS**

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

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

17   Q.     WHAT DID THE RECENT COMMON STOCK EARNINGS SHOW?

18   A.           The comparable, proxy LDCs are currently earning 11.3 percent on common  
19           equity. LDCs are currently earning as much as 13 percent. I have shown these  
20           earnings on common equity in Schedule DAM-12. As this schedule also shows, the  
21           earnings for the comparable companies have been in this range for at least the past  
22           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

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<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**

1

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<sub>F</sub> = the risk-free rate  
22 R<sub>M</sub> = the required overall market return  
23 β = beta, a measure of a given security's risk relative to that of the  
24 overall market.  
25

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

7  
8                                   **XX. STRENGTHS OF THE CAPM**

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

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



## XXI. WEAKNESSES OF THE CAPM

1

2 Q. DOES THE CAPM HAVE PROBLEMS THAT MAY BE IMPORTANT WHEN  
3 APPLYING IT IN A RATEMAKING PROCEEDING?

4 A. Yes. The CAPM results are very sensitive to a company's beta. The beta is a  
5 single dimension, market-volatility-over-time, measure of risk. For this reason, the  
6 CAPM cannot account for any risks not included as measures of market volatility,  
7 and the CAPM may not identify significant market risks to investors. Also, it may  
8 understate or overstate the cost of capital. Most utilities have betas less than one, and  
9 a number of analysts have shown that the CAPM underestimates the cost of capital of  
10 companies with betas less than one. This is obviously important when one uses the  
11 CAPM to estimate the cost of capital in a rate proceeding because utilities generally  
12 have betas less than one. Also, the academic literature has shown that the standard  
13 CAPM underestimates the cost of capital of smaller companies, and this  
14 underestimation of capital costs may require an adjustment.

15 Q. CAN YOU CITE SOURCES IN THE ACADEMIC LITERATURE THAT  
16 RECOGNIZE THAT THE CAPM METHOD UNDERESTIMATES THE COST OF  
17 CAPITAL OF SMALLER COMPANIES?

18 A. Yes. For at least two decades, various authors have reached this conclusion,  
19 and together they reveal the empirical consistency of this finding. For example, R. W.  
20 Banz<sup>6</sup> and M. R. Reinganum<sup>7</sup> in the 1980's are good references which point out the  
21 size bias in the CAPM. Reinganum examined the relationship between the size of the

<sup>6</sup> Banz, R.W., "The Relationship Between Return and Market Value of Common Stock," *Journal of Financial Economics*, March 1981, pp. 3-18.

<sup>7</sup> Reinganum, M. R., "Misspecification of Capital Asset Pricing: Empirical Anomalies Based on Earnings, Yields, and Market Values," *Journal of Financial Economics*, March 1981, pp. 19-46.

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.

**XXII. CAPM METHODOLOGY**

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

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

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

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

**XXIII. CAPM RESULTS**

Q. PLEASE EXPLAIN THE RESULTS OF YOUR CAPM ANALYSIS?

A. The results of my two different CAPM analyses for the comparable LDCs are 12.52 percent and 13.17 percent. I have illustrated these calculations in Schedules DAM-23 and DAM-24. Because I used the comparable LDCs as proxies for PSNC 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

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<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.

1 MS. FORCE: Also, I thought the Orderd addressed  
2 this, but if it did not, I would like to move the Prefiled  
3 Testimony of Roger Colton as witness for the Attorney  
4 General's office together with exhibits. And one of those  
5 exhibits that was left out on the first day of filing was  
6 filed the next day.

7 COMMISSIONER JOYNER: Without objection that is  
8 allowed.

9 (Whereupon, the testimony of Roger Colton  
10 was copied into the record as if given  
11 orally from the stand. And the exhibits  
12 were admitted into evidence.)  
13  
14  
15  
16  
17  
18  
19  
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21  
22  
23  
24

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

2 A. My name is Roger Colton. My address is Fisher, Sheehan & Colton, Public Finance and  
3 General Economics, 34 Warwick Road, Belmont, Massachusetts, 02478.

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

6 A. I am a principal in the firm of Fisher Sheehan & Colton, Public Finance and General  
7 Economics of Belmont, Massachusetts. In that capacity, I provide technical assistance to a  
8 variety of federal and state agencies, consumer organizations and public utilities on rate and  
9 customer service issues involving telephone, water/sewer, natural gas and electric utilities.

10  
11 **Q. FOR WHOM ARE YOU TESTIFYING IN THIS PROCEEDING?**

12 A. I am testifying on behalf of the North Carolina Department of Justice ("DOJ") of Raleigh,  
13 North Carolina.

14  
15 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND.**

16 A. I work primarily on low-income utility issues. This involves regulatory work on rate and  
17 customer service issues, as well as research into low-income usage, payment patterns, and  
18 affordability programs. At present, I am working on various projects in the states of New  
19 Hampshire, New Jersey, Maryland, Pennsylvania, North Carolina, Ohio, Indiana, Iowa,  
20 Arkansas, Colorado, New Mexico, Oregon and Washington. My clients include state  
21 agencies (e.g., Pennsylvania Office of Consumer Advocate, Maryland Office of Peoples  
22 Counsel, North Carolina Department of Justice, Iowa Department of Human Rights), federal  
23 agencies (e.g., U.S. Department of Health and Human Services), community-based

1 organizations (*e.g.*, Community Action of New Mexico, Coalition to Keep Indiana Warm,  
2 Community Action Partnership of Oregon), and private utilities (*e.g.*, Entergy Services,  
3 Citizens Gas and Coke Utility, Tacoma Public Utilities). In addition to state- and utility-  
4 specific work, I engage in national work in the United States and Canada. For example, I  
5 am currently working on a national study of the responses of water utilities to the payment  
6 troubles of residential customers for the American Water Works Association Research  
7 Foundation. In 2007, I was part of a team that performed a multi-sponsor public/private  
8 national study of low-income energy assistance programs.

9  
10 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

11 A. After receiving my undergraduate degree from Iowa State University (1975), I obtained  
12 further training in both law and economics. I received my law degree from the University of  
13 Florida in 1981. I received my Masters Degree (economics) from the McGregor School  
14 (Antioch University) in 1993.

15  
16 **Q. HAVE YOU AUTHORED ARTICLES ON PUBLIC UTILITY REGULATORY**  
17 **ISSUES?**

18 A. Yes. I have published more than 80 articles in scholarly and trade journals, primarily on  
19 low-income utility and housing issues. I have published an equal number of technical  
20 reports for various clients on energy, water, telecommunications and other associated low-  
21 income utility issues. A list of my professional publications is appended as Attachment RC-  
22 1.  
23

1 **Q. HAVE YOU EVER TESTIFIED BEFORE THIS OR OTHER UTILITY**  
2 **COMMISSIONS?**

3 A. Yes. I have previously testified before the North Carolina Utilities Commission ("NCUC"  
4 or "Commission") on a variety of low-income energy issues. In addition, I have testified in  
5 regulatory proceedings in more than 30 states and various Canadian provinces on a wide  
6 range of low-income water, telecommunications and energy issues. Proceedings in which I  
7 have previously appeared as an expert witness are listed in Attachment RC-1.

8  
9 **Q. PLEASE EXPLAIN THE PURPOSE OF YOUR TESTIMONY.**

10 A. My testimony supports certain DOJ objections to the proposal of Public Service  
11 Company of North Carolina ("PSNC" or "Company") to raise its residential customer  
12 charge from \$10 per month to \$12 per month in this proceeding. Specifically, I will  
13 examine the relationship between income and natural gas expenditures. I conclude that  
14 income is directly related to natural gas consumption and expenditures. As income  
15 increases, natural gas usage increases and vice versa. I will also examine the relationship  
16 between aging and natural gas expenditures. As customers age, their natural gas usage  
17 decreases. I conclude that more aged customers use less natural gas. As a result, I  
18 conclude that the Company's proposed rate structure would disproportionately burden  
19 low-income, low-use customers. The proposed rate structure will also shift risks from  
20 PSNC's shareholder to its customers.<sup>1</sup>

21  

---

<sup>1</sup> PSNC is a wholly-owned subsidiary of SCANA and therefore has only one shareholder.

As part of this review, I also consider the context within which customers face natural gas rate increases in North Carolina. I conclude that natural gas prices have contributed significantly to the increase in cost of living that consumers face, and now is not the time to shift risks from the utility to its customers through an increase in the fixed monthly charge. The burden of an increase in the fixed charge is particularly great for low and fixed income customers, as gas is increasingly unaffordable to many of them.

**Part 1. The Relationship between Income and Natural Gas Usage.**

**Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.**

A. In this section of my testimony, I examine the natural gas expenditure patterns in North Carolina to assess what relationship, if any, exists between income and natural gas consumption. I conclude that a direct relationship exists between income and natural gas consumption. As income increases, natural gas usage and expenditures increase as well, and as income decreases, natural gas usage and expenditures decrease as well. This point may seem obvious, but contentions have been made by some utilities that lower income households use more natural gas because their housing tends to be less well insulated or their appliances less efficient. The data show, however, that higher income customers live in larger residences and use more natural gas. A variety of data support this conclusion. As a result, the Company's proposal to impose a significant (20%) increase in the customer charge, with adverse impacts falling primarily on low-use customers, will

1 result in the greatest rate increases falling on the most vulnerable customers, the low-  
2 income and aging.

3  
4 **A. Income and Usage.**

5 **Q. HAVE YOU EXAMINED DATA SPECIFIC TO NORTH CAROLINA TO**  
6 **ASSESS THE RELATIONSHIP BETWEEN NATURAL GAS USAGE AND**  
7 **INCOME?**

8 **A.** I have examined data produced by the U.S. Census Bureau setting forth natural gas bills  
9 by income level for the State of North Carolina. While the Census data do not contain  
10 usage data, per se, the data on expenditures will, nonetheless, provide adequate insights  
11 into the relative use of natural gas by income level.

12  
13 The North Carolina data are set forth in Schedule RDC-1. In this schedule, I present  
14 natural gas monthly expenditures as reported by the 2006 American Community Survey,  
15 the most recent Census data available. The American Community Survey collects annual  
16 data on selected household and housing characteristics in years between the Decennial  
17 Census. As can be seen, natural gas expenditures increase as each income tier increases  
18 in North Carolina. For example, the monthly 2006 expenditures for households with  
19 incomes of \$250,000 or more are almost three times higher than the monthly  
20 expenditures for households with incomes less than \$10,000 (\$104.20 vs. \$34.90).  
21 Indeed, the median income in North Carolina in 2006 was \$42,625. The monthly natural  
22 gas expenditure for the income range encompassing that median income (\$40,000 -  
23 \$50,000) was \$48.30, nearly 40% higher than expenditures at the lowest income level



1 (\$34.90), but less than 50% of expenditures at the highest income level (\$104.20).

2 Schedule RDC-2 presents the same data graphically. The graphic presentation of the data  
3 reveals in clear terms the continuous increase in natural gas consumption as household  
4 income increases.

5  
6 **Q. WOULD THE RESULTS OF YOUR ANALYSIS CHANGE IF YOU EXAMINED**  
7 **THE POVERTY LEVEL OF A HOUSEHOLD RATHER THAN HOUSEHOLD**  
8 **INCOME?**

9 A. No. Poverty Level is a measure of income taking into account household size. Poverty  
10 Level recognizes, for example, that a three-person household with an income of \$10,000  
11 is "poorer" than a two-person household with an income of \$10,000. Overlaying  
12 household size onto income by considering the Poverty Level of a household does not  
13 change the results of my inquiry. Schedule RDC-3 presents monthly natural gas bills for  
14 North Carolina by increasing levels of the Federal Poverty Level. In North Carolina, the  
15 monthly natural gas expenditure at over 300% of Poverty or more is more than 170% of  
16 the natural gas expenditures for households with income below 50% of Federal Poverty  
17 Level. Natural gas expenditures for households with income between 200% and 300% of  
18 Poverty Level is more than 30% higher than gas consumption of households with income  
19 less than 50% of Poverty in North Carolina.

20  
21 **Q. IS THERE OTHER EMPIRICAL ANALYSIS OF THE RELATIONSHIP**  
22 **BETWEEN INCOME AND NATURAL GAS EXPENDITURES THAT IS**  
23 **CONSISTENT WITH THIS NORTH CAROLINA DATA?**

1 A. Yes. The U.S. Department of Energy, Energy Information Administration ("DOE/EIA")  
2 has published regular periodic reports entitled the *Residential Energy Consumption*  
3 *Survey* ("RECS"). In a document released in June 2001, DOE/EIA released its analysis of  
4 RECS data titled *Natural Gas Use in American Households*. In the section of its analysis  
5 that examines the relationship between income and natural gas usage, DOE/EIA states:

6 The use of natural gas for any end use and as the main heating fuel was  
7 approximately the same regardless of household income category. In  
8 contrast, natural gas consumption and expenditures per household did vary  
9 by household income—higher income households consumed more and  
10 spent more on average. Higher income households lived in larger housing  
11 units, which require more energy for heating.

12  
13 (EIA/DOE, *Natural Gas Use in American Households*, Household Income, at text  
14 accompanying Figures 1 – 3) (June 2001).

15  
16 Q. DOES THE DEPARTMENT OF ENERGY'S OBSERVATION THAT "HIGHER  
17 INCOME HOUSEHOLDS LIVE IN LARGER HOUSING UNITS, WHICH  
18 REQUIRE MORE ENERGY FOR HEATING" APPLY TO NORTH CAROLINA?

19 A. Yes. This is an empirically demonstrable fact in North Carolina. Schedule RDC-4  
20 presents North Carolina data on natural gas expenditures by income and housing unit  
21 size. In Schedule RDC-4, the size of the housing unit is measured in terms of the number  
22 of bedrooms. Two observations can be drawn from Schedule RDC-4. First, there is a  
23 slight relationship between income and natural gas usage within each housing unit size.  
24 As a general rule, as income increases, holding the housing unit size constant, the natural  
25 gas expenditures increase only modestly. Second, and more significantly, however, there  
26 is a marked difference in the average expenditures by income for the income groups as a

1 whole. This is because the distribution of households by housing unit size is not similar  
2 between income ranges (see, Schedule RDC-6 and Schedule RDC-7 below, along with  
3 accompanying text). While there may be little or no distinction between a higher-income  
4 household in a four-bedroom housing unit and a lower-income household in a four-  
5 bedroom housing unit, because there are far fewer lower-income households in four-  
6 bedroom units, the overall difference in consumption is much greater.

7  
8 The same impacts can be seen in Schedule RDC-5. This data also presents the  
9 distribution of natural gas expenditures by housing unit size. In Schedule RDC-5, housing  
10 unit size is measured in terms of the total number of rooms (not merely the number of  
11 bedrooms). As can be seen, the average total natural gas expenditures in North Carolina  
12 varies sharply by income. As with the number of bedrooms, the reason for this is that the  
13 higher-income households live in larger housing units.

14  
15 **Q. IS YOUR CONCLUSION THAT HIGHER-INCOME HOUSEHOLDS LIVE IN**  
16 **LARGER HOUSING UNITS A DATA-BASED OBSERVATION?**

17 **A.** Yes. This conclusion is based on two different data-based observations. First, Schedule  
18 RDC-6 presents the average income in North Carolina by the number of rooms in a  
19 housing structure, as well as the average income in North Carolina by the number of  
20 bedrooms in a housing structure. Schedule RDC-6 clearly shows that as housing  
21 structures get larger in North Carolina, average income increases. There are two standard  
22 ways to measure the size of a housing unit. One way is to look at the number of total

rooms. The other way is to look at the number of bedrooms. Both of these approaches document that smaller sized units have lower-income households.

➤ While the average income of a North Carolina household living in a unit with one room is \$22,750, the average income of a household living in an eight-room unit is \$89,641.

➤ The same relationship holds true for housing size measured by the number of bedrooms. While the average income for a North Carolina household living in a unit with one bedroom is \$27,641, the average income of a household living in a housing unit with five or more bedrooms is \$125,570.

In both instances (number of rooms, number of bedrooms), the average income increases as the size of the housing unit increases.

In addition, Schedule RDC-7 presents a distribution of North Carolina households by the size of the housing unit in which they live, separately examining the size of the housing unit measured by the number of rooms and the number of bedrooms. The data show that a higher proportion of lower-income households live in smaller housing units. For example, while 60% of households with incomes less than \$10,000 live in units with two bedrooms or less, only 4% of households with incomes greater than \$250,000 (and only 7% of households with incomes between \$150,000 and \$250,000) live in units that small. Conversely, while 72% of households with incomes of \$250,000 or more live in units with four or more bedrooms (and 53% of households with incomes between \$150,000 and \$250,000 do), only 6% of households with incomes below \$10,000 live in units that large (and only 7% of households with incomes between \$10,000 and \$20,000 do).

1  
2 The same observations can be made about the relationship of income and housing unit  
3 size measured in terms of the number of rooms (not merely number of bedrooms). While  
4 75% of North Carolina households with incomes greater than \$250,000 live in housing  
5 units with eight or more rooms (and 55% of households with incomes between \$150,000  
6 and \$250,000 do), only 4% of households with incomes less than \$20,000 do (and only  
7 6% of households with incomes between \$20,000 and \$30,000 do).

8  
9 **Q. ARE THERE OTHER WAYS THROUGH WHICH TO GAIN INSIGHTS INTO**  
10 **THE RELATIONSHIP BETWEEN HOUSING UNIT SIZE AND INCOME?**

11 A. Yes. One extension of the observation that low-income households live in smaller  
12 housing units is the further observation that low-income households tend to live in denser  
13 housing units as well. To assess the extent to which this is true in North Carolina, I  
14 examined the relationship between income and the type of building in which customers  
15 have their housing units. Building type is disaggregated by the type of construction  
16 (single family, multi-family, mobile home), and the number of units in each building.

17  
18 Schedule RDC-8 shows that residents of multi-family housing units are  
19 disproportionately low-income households. While 30% of gas-consuming households  
20 with incomes less than \$10,000 live in buildings with three or more units, and 21% of  
21 gas-consuming households with incomes between \$10,000 and \$20,000 do, only 4% of  
22 gas-consuming households with incomes of \$150,000 or more live in buildings with three  
23 or more units. Conversely, while between 86% and 94% of gas-consuming households

1 with incomes \$75,000 or higher live in single family detached homes, only 42% of gas-  
2 consuming households with incomes less than \$10,000 do (and only 51% of households  
3 with incomes between \$10,000 and \$20,000 do).

4  
5 **Q. WHAT IS THE SIGNIFICANCE OF THESE DIFFERENCES IN THE TYPES OF**  
6 **BUILDINGS IN WHICH LOW-INCOME HOUSEHOLDS LIVE?**

7 A. The significance arises in two ways. First, these data further support the conclusion that  
8 low-income households have lower natural gas consumption. Schedule RDC-8 presents  
9 natural gas expenditure data broken down by building type and income. Given the  
10 differences in natural gas consumption between housing type—single family detached  
11 homes clearly have higher natural gas consumption than do any type of multi-family  
12 dwelling—and the higher rate at which low-income households live in multi-family units,  
13 there is a constant increase in natural gas expenditures as income increases, from \$36  
14 (households with income below \$10,000) to \$102 (households with income greater than  
15 \$250,000) for the housing unit types that I examined.

16  
17 Secondly, these data show that the equal imposition of fixed charges on low-income,  
18 low-use customers through the proposed increase in the customer charge would be  
19 inequitable, given the lower fixed distribution costs imposed by low-income customers  
20 due to their higher density housing. To the extent that higher density housing is multi-  
21 family housing, for example, there would be a single service associated with multiple  
22 accounts. The cost per account thus would be less. Even if density is on a per land-area  
23 basis—"land area" is a term-of-art used by the Census Bureau to calculate density—there

1 would be fewer miles of distribution system for each customer, again lowering costs on a  
2 per-customer basis. Under these circumstances, imposing a higher customer charge to  
3 recover fixed costs would involve a direct subsidy from the lower-income customers  
4 living in the higher-density housing units to the higher-income customers living in the  
5 lower density housing units.

6  
7 **Q. IS THE NORTH CAROLINA DATA YOU DISCUSS ABOVE CONSISTENT**  
8 **WITH OTHER GOVERNMENT DATA ON NATURAL GAS EXPENDITURES**  
9 **AND CONSUMPTION?**

10 A. Yes. Schedule RDC-9 presents U.S DOE data on the relationship between income and  
11 natural gas consumption. This data, based on the tri-annual Residential Energy  
12 Consumption Survey ("RECS"), shows that natural gas consumption increases as income  
13 increases. In addition, the U.S. Department of Labor ("DOL") reports natural gas  
14 expenditures by region by income. North Carolina is in the South regional data reported  
15 by the Department of Labor's Consumer Expenditures Survey ("CEX"). The CEX data  
16 (Schedule RDC-10) corroborates the state-specific and national data on the relationship  
17 between natural gas consumption and income. As income increases, natural gas  
18 expenditures increase as well and vice-versa.

19  
20 **B. Aging and Usage.**

21 **Q. IS THERE A CORRELATION BETWEEN LOW USAGE AND ANY OTHER**  
22 **VULNERABLE POPULATION GROUP?**

1 A. Yes. Schedule RDC-11 presents data on the association between natural gas  
2 expenditures and age. Schedule RDC-11 (page 1 of 2) presents North Carolina-specific  
3 data. These North Carolina-specific data show that monthly natural gas expenditures  
4 increase as householders grow older and move into the working population. The natural  
5 gas expenditures top out in the prime working years, as householders might have families  
6 and own larger homes. As North Carolina residents grow older past their working years,  
7 however, they begin to downsize their living units and their natural gas expenditures  
8 begin to decline. After age 75, consumers' natural gas expenditures exhibit a noticeable  
9 decline.

10  
11 Schedule RDC-11 (page 2 of 2) confirms that these North Carolina-specific data are not  
12 atypical. This schedule presents similar data published by the U.S. Department of Labor  
13 through its annual Consumer Expenditures Survey ("CEX"). While the CEX data does  
14 not provide state-specific information, it does provide regional data by age of the  
15 householder. As with the North Carolina data, the South regional data show an increase  
16 in natural gas expenditures through the years that a householder participates in the work  
17 force, maintains a family, and likely owns a larger home. As families and housing units  
18 begin to downsize, the natural gas consumption of these households begins to decrease.  
19 In particular, the consumption in the post-working age tier (65 and older for CEX data)  
20 shows a natural gas expenditure noticeably lower than those of householders in their  
21 prime earning years.

22



1 It is evident that there is a trigger point at which aging householders begin to experience  
2 declining natural gas consumption. Like low-income low-use households, these lower  
3 use aging householders would be harmed by the high customer charge rate design  
4 proposal advanced by the Company in this proceeding.  
5

6 **Q. WHY IS IT SIGNIFICANT THAT INCOME AND AGING ARE ASSOCIATED**  
7 **WITH NATURAL GAS CONSUMPTION?**

8 The relationship between income, aging, and natural gas consumption has substantial  
9 implications for the proposal by PSNC to allocate additional costs to an increase in the  
10 customer charge rather than collecting those costs through a volumetric charge. First, the  
11 impact of the Company's proposal is to disproportionately increase the burden on low use  
12 customers, including low income and aging customers who are least able to bear the  
13 burden. This burden-shifting is particularly inappropriate given the relative housing  
14 density of lower income customers, and the associated lower infrastructure cost.  
15

16 Second, the impact of the Company's proposal is to shift the risks of the utility's rates  
17 from investors to ratepayers. The Company's shareholder is less at risk if customers pay  
18 more in high fixed rates and less in volumetric rates. In contrast, other providers of retail  
19 services must recover their overhead fully based on the volume of purchases their  
20 customers make. With the number of Public Service customers increasing at 4% per year,  
21 increasing the fixed monthly customer charge increases the risks for customers while at  
22 the same time decreasing the risks for the Company shareholder. As the number of  
23 customers continues to grow, Company revenues will increase to the extent that such

1 revenues are based on the number of customers served. Taken together, these effects of  
2 the proposal not only shift the risks from the Company to its customers, but also shifts the  
3 cost of reducing shareholder risk onto the rates of those least able to afford the increases.

4  
5 Finally, the impact of the Company's proposed increased in the customer charge reduces  
6 both the ability and the incentive for customers to pursue usage reduction activities. It  
7 reduces the ability of customers to engage in such conservation because, by reducing the  
8 bill savings generated by conservation efforts, the proposal makes it more difficult for the  
9 customer to cost-justify his or her investment. It reduces the incentive for customers to  
10 pursue usage reduction both because it reduces the savings to be generated and because it  
11 reduces the return on each dollar invested in a conservation measure.

12  
13 **Part 2. Low-Income Energy Burdens in North Carolina.**

14 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**  
15 **TESTIMONY.**

16 **A.** In this section of my testimony, I consider the context within which the Company is  
17 proposing a rate increase for low-income customers. I conclude that the cost of natural  
18 gas service and other home energy costs are increasingly unaffordable for low-income  
19 and moderate income households. This is not a good time to shift further costs to such  
20 customers. Nor is it a good time to shift risk associated with volumetric charges from  
21 PSNC's shareholder to ratepayers in order to shield its shareholder from financial risk.

22

**A. The Burden and Timing of Risk Shifting to Low-Income and Aging Customers.**

**Q. WHAT IS THE IMPLICATION FOR LOW-USE CUSTOMERS OF PLACING  
ADDED COSTS ON TO THE CUSTOMER CHARGE?**

A. First, by placing added costs on to the fixed customer charge for low-use customers the Company is not only imposing a disproportionate rate increase on those low-use customers, but the Company is making it more difficult for customers to respond to increasing home energy bills by adjusting their usage as a budget-control measure.

Second, the impact of rising costs is more burdensome not only on low income but also on fixed income households such as the aging on retirement incomes. For example, consider the income data presented in Schedule RDC-12. This Schedule examines the income for households with various demographics by income for the years 2004 through 2006, the last year for which data is available. Median income in North Carolina grew 8.1% during that three-year period, with households having wage and earnings income experiencing a roughly equal income growth, if not slightly greater (8.5% for households with income from wages and earnings). In contrast, households on Social Security experienced an income growth of only 7.0%, while households with retirement income experienced a growth of only 0.8%. Fixed income households also experienced increasing hardship in the three years 2004 through 2006, with the income of households receiving Supplemental Security Income (SSI) increasing by only 4.9% and public assistance income actually *decreasing* by nearly eight percent (7.9%).

1 In contrast to these changes in income, according to the U.S. Department of Labor's  
2 "inflation calculator," items that cost \$100 in 2004 would have cost \$106.72 in 2006, i.e.,  
3 the cost of living increased 6.7%.<sup>2</sup>

4  
5 As can be seen, therefore, while households as a whole gained somewhat in their  
6 purchasing ability relative to the increased cost-of-living (income grew 8.1% while the  
7 cost of living increased 6.7%), households on Social Security barely held even (with an  
8 income increase of 7.0%). Other households on fixed income (SSI, public assistance,  
9 retirement income) actually lost ground relative to their purchasing power between 2004  
10 and 2006.

11  
12 Home energy in general, and natural gas energy in particular, have contributed to the  
13 increasing cost-of-living. The U.S. Department of Labor measures the cost-of-living  
14 using the three-year period 1982 through 1984 as the base (Base=100). By January 2004,  
15 the Consumer Price Index for all urban consumers ("CPI-U") for "all items" had  
16 increased to 186.2. In the time between January 2004 and June 2008, the CPI-U  
17 increased further to 217.4. The importance of the "all items" lies in the comparisons it  
18 allows me to make with specific components of a household's budget. From January  
19 2004 through June 2008:

- 20 ➤ Household energy (not including transportation) increased from 140.0 to
- 21 207.912;
- 22
- 23 ➤ Utility (piped) gas service increased from 169.2 to 273.766;
- 24

---

<sup>2</sup> The DOL "inflation calculation" can be accessed: [http://www.bls.gov/data/inflation\\_calculator.htm](http://www.bls.gov/data/inflation_calculator.htm).

- Electricity increased from 140.4 to 184.737;
- Food (at home) increased from 183.2 to 213.706;
- Rent (of primary residence) increased from 208.2 to 242.837;
- Clothing decreased from 120.1 to 118.107.

My purpose in reviewing these figures is not to make an assessment of the relative importance of expenditures for any given household. Rather, the review clearly reveals the disproportionately high increase in natural gas prices as compared to increases in the price of other basic household necessities such as food, clothing and shelter.

**Q. WHAT DO YOU CONCLUDE?**

A. Given the burden customers already face from rising costs, now is not the time to allow a shift of risks in utility rates from the utility to its customers by increasing the fixed customer charge. Many households today are struggling to meet basic needs. The households in particular that I have identified above include those with aging family members as well as those on low- and fixed-incomes. These are precisely the customers, however, who will bear a disproportionately increased burden should the Company's proposal to increase its fixed customer charge by 20% be approved.

**B. The Particular Burden on Low-Income Customers.**

**Q. PLEASE DESCRIBE THE STATUS OF HOME ENERGY AFFORDABILITY IN NORTH CAROLINA.**

1 A. Home energy bills, including natural gas bills, pose an increasing burden to low-income  
2 households in North Carolina today. The standard measure of the affordability of home  
3 energy is based on home energy burdens. Home energy burdens represent bills as a  
4 percentage of income. The difference between an affordable home energy bill and actual  
5 home energy bills is known as the Home Energy Affordability Gap.<sup>3</sup> In North Carolina,  
6 the Home Energy Affordability Gap is large and getting larger. The 2007 Affordability  
7 Gap for households with income at or below 185% of the Federal Poverty Level<sup>4</sup> reached  
8 \$1,335 per household. This means that the cost of home energy was \$1,335 more than  
9 such households could pay, given the income and other household budget items.

10  
11 **Q. IS THE INCREASE IN THE HOME ENERGY AFFORDABILITY GAP**  
12 **STRICTLY A LOW-INCOME CONCERN IN NORTH CAROLINA?**

13 A. No. Indeed, one concern about the Home Energy Affordability Gap in North Carolina is  
14 the extent to which the unaffordability of home energy is now reaching into the more  
15 moderate income levels. Schedule RDC-13 shows the home energy burdens by Federal  
16 Poverty Level for each year 2004 through 2007, the most recent years available. As can  
17 be seen from Schedule RDC-13, in 2007, home energy bills approached 9% of income

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<sup>3</sup> In calculating the Home Energy Affordability Gap, affordability is defined as a 6% home energy burden. For a household with an income of \$10,000, in other words, an "affordable" home energy bill is \$600. If that household has an actual home energy bill of \$900, the household has an energy burden of 9%, and has a Home Energy Affordability Gap of \$300.

<sup>4</sup> The generally accepted measure of "being poor" in the United States today indexes a household's income to the "Federal Poverty Level" published each year by the U.S. Department of Health and Human Services (HHS). The Poverty Level looks at income in relation to household size. This measure recognizes that a three-person household with an annual income of \$6,000 is, in fact, "poorer" than a two-person household with an annual income of \$6,000. The federal government establishes a uniform "Poverty Level" for the 48 contiguous states. A household's "level of Poverty" refers to the ratio of that household's income to the Federal Poverty Level. For example, the year 2005 Poverty Level for a two-person household was \$12,830. A two-person household with an income of \$6,415 would thus be living at 50% of Poverty.

1 for households at 150 – 185% of Federal Poverty Level for the first time. These more  
2 moderate income households experienced a home energy burden of only 6.9% in 2004.  
3 At the same time, the home energy burdens for the lowest-income households in North  
4 Carolina continue to escalate further beyond those levels that are seen as affordable.  
5

6 **Q. ARE THERE SIGNIFICANT NUMBERS OF NORTH CAROLINA**  
7 **HOUSEHOLDS WHO LIVE WITH THESE HOME ENERGY BURDENS?**

8 A. A substantial number of North Carolina households live with the annual incomes  
9 associated with these unaffordable home energy burdens. As shown in Schedule RDC-  
10 14, while more than 173,000 North Carolina households lived with income at or below  
11 50% of the Federal Poverty Level at the time of the 2000 Census, more than 93,000 more  
12 lived with income between 50% and 74% of Poverty. An additional roughly 120,000  
13 more households lived with income between 75% and 99% of the Federal Poverty Level.  
14

15 **Q. HAVE NATURAL GAS PRICES CONTRIBUTED TO THIS INCREASE IN THE**  
16 **NORTH CAROLINA HOME ENERGY AFFORDABILITY GAP?**

17 A. Yes. According to the Energy Information Administration (EIA) of the U.S. Department  
18 of Energy (DOE), winter natural gas prices in North Carolina have increased more than  
19 16% since 2004 (from \$1.199/ccf to \$1.394/ccf). I recommend that the NCUC exercise  
20 extreme caution with respect to rate design proposals, such as the Company's proposal to  
21 substantially increase its customer charge, that have the impact of contributing even more  
22 to these increasing price levels.  
23

1   **Q.   DOES THIS CONCLUDE YOUR TESTIMONY?**

2   **A.   Yes, it does.**

3



1           COMMISSIONER JOYNER: And it was my recollection  
2 that we addressed that in the Order, too. But out of an  
3 abundance of caution, we have done it here again today.

4           MS. GRIGG: We also move into admission the  
5 exhibits to the Stipulation that were filed on August 13  
6 and as amended on August 27 into evidence.

7           COMMISSIONER JOYNER: Without objection, that,  
8 too, is allowed.

9                       (Whereupon, the Stipulation and exhibits  
10 are admitted into evidenced.)

11           MS. GRIGG: Thank you. And before tendering the  
12 witnesses, I just want to briefly go on record and state  
13 that the Stipulation among CUCA, Public Staff and the  
14 Company was a culmination of hundreds of data requests and  
15 days of negotiations. And I just want to thank CUCA and  
16 the Public Staff for diligently trying to resolve this  
17 case. They are professional among good faith.

18                       The witnesses are available for  
19 cross-examination.

20           COMMISSIONER JOYNER: Ms. Grigg, Commissioner  
21 Ervin just raised a question that I was actually going to  
22 look at my notes to see if I had clarity on, but the most  
23 expedient way is to ask you: Did you move the admission  
24 of Ms. Paton's original Direct Prefiled Testimony?

1 MS. GRIGG: Yes, ma'am. If I didn't, it was  
2 intended to move her Direct, her exhibits as revised and  
3 her Supplemental and exhibits.

4 COMMISSIONER JOYNER: Okay. Thank you. Just to  
5 be clear, the original Direct Testimony has been admitted  
6 into the record and any exhibits attached thereto are also  
7 admitted. The summary addressed only, though, the  
8 Supplemental Testimony?

9 MS. GRIGG: Yes, ma'am.

10 COMMISSIONER JOYNER: Anything else?

11 MS. GRIGG: No, ma'am. The witnesses are  
12 available for questions.

13 COMMISSIONER JOYNER: I believe the indications  
14 prehearing were that only the Attorney General had  
15 questions of the witnesses. If that is correct, Ms.  
16 Force, you may proceed.

17 MS. FORCE: Just for clarification, I think the  
18 other parties won't have questions following mine. If  
19 they do have any, I just assume they go first.

20 MR. PAGE: We support the Stipulation and  
21 therefore have no questions of the panel.

22 MS. HOLT: The Public Staff has no questions.

23 CROSS-EXAMINATION BY MS. FORCE:

24 Q Good morning.

1 A (panel) Good morning.

2 Q I am sorry about the disruption a little bit while  
3 -- we moved while you were presenting your -- we tried not  
4 to do it while you were actually making your opening  
5 statements, so you won't be craning your necks quite as  
6 much to look at me.

7 My name is Margaret Force. I am with the  
8 Attorney General's office, and I have some questions for  
9 you about the Customer Usage Tariff. I forgot to mention  
10 when I outlined the issues that I'm going to start with  
11 how the CUT works. The CUT will apply to the margin rate  
12 that is volumetric in this case. Am I correct about that?

13 A (Ms. Paton) Yes, that's correct.

14 Q I'm jumping right in on what the CUT is. You  
15 described somewhat in your testimony, but, am I correct  
16 this is an adjustment mechanism that will provide for  
17 deferral and later true-up of the residential and  
18 commercial SGS rates on the basis of variations and  
19 consumption?

20 A (Ms. Paton) That is correct.

21 Q And that would apply only to the margin part of  
22 the rate, not to the gas cost?

23 A (Ms. Paton) That's correct.

24 Q I'd like to look at Exhibit B of the Stipulation

1       --

2               MS. GRIGG: Was that "B" as in boy?

3               MS. FORCE: "B" as in boy.

4       Q       -- in Exhibit B, just to clarify what we are  
5 talking about the rate applying to, the margin that is  
6 recovered from residential and small general service  
7 customers is recovered in two parts; am I right? First in  
8 the monthly facilities charge, and then in a portion of  
9 what is called energy charges on Exhibit B?

10      A       (Ms. Paton) That's correct.

11      Q       And I have passed out an exhibit that is premarked  
12 as Attorney General Cross-Examination Exhibit 1.1. And  
13 I'd submit to you that what is presented on that reflects  
14 the residential and commercial rates as they apply to  
15 margin, the facilities charge and then the usage charge  
16 that is the part associated with margins --

17               COMMISSIONER JOYNER: You would like this  
18 exhibit identified as marked; right?

19               MS. FORCE: I'm sorry, yes. Thank you.

20                       (Whereupon, Attorney General CX Exhibit 1.1  
21 was marked for identification.)

22      A       (Ms. Paton) That's correct.

23      Q       So what we are talking about the CUT applying to  
24 is that .35678 per therms for residential customers and

1 the .25160 per therm for commercial customers; is that  
2 right?

3 A (Ms. Paton) That's right.

4 Q I think we said this but the amount that is  
5 reflected in that exhibit for the usage charge is the  
6 difference between what appears on Exhibit B under energy  
7 charges and the taking out all the gas costs; is that  
8 right?

9 A (Ms. Paton) That's correct. If you start with the  
10 energy charge Exhibit B and back out the gas components.

11 Q Those gas components taking down to the charge  
12 that appears on this exhibit is what appears on your  
13 Exhibit D to the Stipulation; is that right, in the  
14 factors that you used for calculating the CUT?

15 A (Ms. Paton) That's correct.

16 Q The "R" value?

17 A (Ms. Paton) The "R" value.

18 MS. FORCE: I'm passing around an exhibit that  
19 is premarked Attorney General Cross-Examination Exhibit  
20 No. 1. I'd ask that it be marked for identification.

21 COMMISSIONER JOYNER: That's allowed without  
22 objection.

23 (Whereupon, Attorney General CX Exhibit No.  
24 1 was marked for identification.)

1 MS. GRIGG: May we see these before she starts  
2 asking the witness questions on them?

3 MS. FORCE: I apologize.

4 MS. GRIGG: So we have an opportunity to object  
5 if necessary.

6 COMMISSIONER JOYNER: Now, Ms. Force, the first  
7 exhibit you had identified was AG CX Exhibit 1.1 and the  
8 second one you have marked AG CX Exhibit 1.

9 MS. FORCE: I apologize if it's a little out of  
10 order. The order of all the exhibits would have changed  
11 had I given it a different number. If you want me to  
12 change them as we go, we can do that. But the rest of  
13 them should follow in order with numbers after this.

14 COMMISSIONER JOYNER: Okay. Let's proceed as we  
15 have started and see how it works out.

16 continued CROSS-EXAMINATION BY MS. FORCE:

17 Q I represent to you that the tables that are shown  
18 here reflect the factor shown on Exhibit D relating to the  
19 CUT calculation, and also use the "R" value to calculate  
20 what the guaranteed therms per customer would be under the  
21 CUT mechanism to come up with for each month of guaranteed  
22 or CUT amount that's assured on therms per-customer-basis  
23 in Column 4, and the revenue per customer in Column 6.  
24 And I'd ask you to take a look at these two tables and the

1 factors to verify whether those are in accord with Exhibit  
2 D and E?

3 A (Ms. Paton) The factors do agree with Exhibit D to  
4 the Stipulation in the normal degree days -- agreed  
5 amounts originally in Exhibit 9. I'm afraid I can't check  
6 the math in my head, but --

7 Q Subject to check, I would represent to you that if  
8 you look at Column 4, and there are notes below that that  
9 is a reflection of combining the factors in the first  
10 three columns to come up with the therms per customers per  
11 month. It would be used in the CUT calculation.

12 And Column 5 would represent that "R" value we  
13 were talking about earlier, that's the charge per therm  
14 associated with the margin volume. And Column 6 reflects  
15 the product of Columns 4 and 5?

16 A (Ms. Paton) Again, subject to checking the math on  
17 it. The inputs and formulas appear correct.

18 Q That's fine. If you look over to Column 7 then  
19 there is a fixed rate column shown there. That's not part  
20 of the CUT calculation; am I right? That's the facilities  
21 charge?

22 A (Ms. Paton) That is correct. It's not part of the  
23 CUT calculation.

24 Q And the eighth column is the total of that two per

1 customer per month, subject to check?

2 A Witness nods.

3 COMMISSIONER JOYNER: Ms. Paton, I saw you nod,  
4 but the court reporter needs to reflect that. Thanks.

5 A (Ms. Paton) Yes.

6 Q Now, if we look at the dollars per month, then we  
7 are talking about what the amount that the Company would  
8 be assured or guaranteed per month in January per customer  
9 would be \$46.06, subject to check, and it goes down to a  
10 low in the Summer months, August months of 305; is that  
11 right?

12 A (Ms. Paton) That's correct. I'll just point out  
13 that the way the CUT mechanism works, it would not  
14 necessarily be collected this that particular month. But  
15 it would be attributable to that month.

16 Q It would be attributable for purposes of  
17 identifying the income for the Company that month?

18 A (Ms. Paton) Yes.

19 Q And you are going ahead and how the mechanism  
20 works for recovery I think -- When you are calculating how  
21 much in a given month to defer, we are not talking about  
22 making an adjustment for each customer, are we? You would  
23 look at this as a class?

24 A (Ms. Paton) That's right.



1 Q So individual customers won't see this kind of  
2 adjustment until the rate changes to pass that along to  
3 them; is that right?

4 A (Ms. Paton) that's correct.

5 Q And each month Public Service would do the  
6 calculation to see how much the guaranteed margins are by  
7 multiplying the number of customers that are served that  
8 month times the number that appears in Column 6 and come  
9 up with what's a normal margin expected would be that  
10 month; is that right?

11 A (Ms. Paton) Yes, ma'am. I have to review. That  
12 is correct. You would compare the normalized consumption,  
13 which in this instance January you are showing 129.1  
14 therms times the margin rate and compare that to the --  
15 take the number of customers times that times the margin  
16 to get margin revenue and compare it to actual volumes  
17 sold to that class times the margin rate. And the  
18 difference is what is deferred.

19 Q You are looking at what your actual revenues were  
20 for that month and comparing that to the revenues that you  
21 would get from the CUT mechanism? And by revenues I mean  
22 from that margin?

23 A (Ms. Paton) Margin revenues, yes.

24 Q So, if for example in January there were 100,000

1 bills for residential and the revenues that you actually  
2 brought in for that component were 4.5 million, then you  
3 would be comparing that 4.5 million of actual to what the  
4 CUT allows 46.06 times 100,000?

5 A (Ms. Paton) Correct.

6 Q And the difference, I will submit, is 106,000 --  
7 if you followed me -- that would be what would go into the  
8 deferred account?

9 A (Ms. Paton) That's correct.

10 Q Now, you have the tariff that sets forth how this  
11 CUT works as part of your Stipulation Exhibit. And I'd  
12 like to take a look at that for a moment. That is Exhibit  
13 E on Page 20, I think.

14 A (Ms. Paton) Yes, ma'am.

15 Q When we are looking down that page there's a lot  
16 of terms used, but have we gone through at least the first  
17 part of it to describe how the adjustments computed each  
18 month?

19 A (Ms. Paton) Yes, I believe so.

20 Q Essentially going through what shows up in this  
21 tariff, we just translated how it works in operation. The  
22 tariff also provides for monthly reports where you will  
23 report how much -- you will report the information about  
24 much the CUT was that month; is that right?

1 A (Ms. Paton) Yes, ma'am.

2 Q And then there is a computation. Could you  
3 describe how the computation works then, please? On Page  
4 21 in plain English, I guess -- I'm talking about --

5 A (Ms. Paton) It's essentially what we -- every six  
6 months what we had proposed was to file for an increment  
7 or decrement depending on the balance in that deferred  
8 account; which is basically you take the balance in the  
9 deferred account, divide it by the applicable annualized  
10 volumes from the rate case for either the residential or  
11 small general service class to come up with the  
12 appropriate increment or decrement.

13 Q Okay. When I use the word "commercial" I mean to  
14 refer to the SGS class so that there's not confusion. But  
15 before -- there's one other component that goes in to that  
16 deferred account and that's interest; right? The Company  
17 gets interest on the balance?

18 A (Ms. Paton) Yes, ma'am; or pays interest.

19 Q Now, when it comes time -- There is twice a year  
20 when that computation would be made as I understand it?

21 A (Ms. Paton) Yes, ma'am.

22 Q And how much notice then does the Commission get  
23 that it's time to make that kind of adjustment?

24 A (Ms. Paton) Bear with me.

1 Q I will submit to you that --

2 A (Ms. Paton) I am thinking it is two weeks prior to  
3 -- similar to the benchmark changes.

4 Q That is right. The tariff provides that the  
5 Commission -- it will be submitted to the Commission for  
6 approval upon 14 days notice. That means you can submit  
7 it to the Commission 14 days ahead of the time it would go  
8 into effect?

9 A (Ms. Paton) That's correct.

10 Q So on or before March 18, 2009, Public Service --  
11 if you will take my word for it that that's about 14 days  
12 before the April 1st increment -- Public Service would be  
13 making its first filing for an adjustment; is that right?

14 A (Ms. Paton) That's correct.

15 Q And customers, how do they get notice of that? Do  
16 you know?

17 A (Ms. Paton) I believe that the notification would  
18 actually take place once the Commission had ruled on the  
19 rate change.

20 Q Okay. I'd like to talk a little about the risks  
21 that are addressed for shareholders, and how the risks of  
22 the mechanism apply to customers. I guess that's you, Mr.  
23 Addison. When consumption goes down per customer, the  
24 shareholders would get the same revenue per customer

1 because of the CUT; is that right?

2 A (Mr. Addison) The same margin?

3 Q The same margin from these customer classes.

4 A (Mr. Addison) Right.

5 Q That's not so for other classes; isn't that right?  
6 There's still some risks associated with variations and  
7 consumption?

8 A (Mr. Addison) There are risks associated with  
9 variations and consumption in other classes, but it's not  
10 shown the trends that these classes have.

11 Q If you lose some of the bigger customers, I guess  
12 it tends to be a big loss all at once as opposed to being  
13 a gradually decreasing decline; is that how it works?

14 A (Mr. Addison) They do.

15 Q As compared to the weather normalization  
16 adjustment, the CUT is broader, isn't it?

17 A (Mr. Addison) It is broader. The weather  
18 normalization attempted to only emulate the changes in  
19 weather although it was imperfect. But this is much  
20 broader and attributes to any factor that the customer  
21 might use less or more for.

22 Q So price sensitivity like, for instance, when  
23 natural gas prices go way up and some customers turn down  
24 the thermostat or if there's an economic down turn, I

1 suppose that could have an effect; is that right?

2 A (Mr. Addison) It could.

3 Q Or conservation and, of course, weather is also  
4 included in that?

5 A (Mr. Addison) It could, or customers using the  
6 system for a new source. For example, if compressed  
7 natural gas vehicles take off and customers start using  
8 the existing system to put more through, we could be  
9 asking for a reduction in the rate.

10 Q So, if Mr. Pickens gets his way, we will see some  
11 increased --

12 A (Mr. Addison) That's his plan.

13 Q -- consumption? Would you agree though that  
14 this -- what this means is that the revenues are less  
15 variable for the Company. But by the same token there's a  
16 higher variability in the rate that the customer is going  
17 to pay after the rate case?

18 A (Mr. Addison) Well, I think related to this narrow  
19 factor the revenues are less variable for the Company. Of  
20 course, there are a lot of other factors that will impact  
21 the margin revenue for the Company as well as like the  
22 other classes you talked about.

23 Q If you look at these two classes that are subject  
24 to the CUT though, the Company still has some risk

1 associated with cost increases. But in terms of changes  
2 in volumes used, is there any risk that stays with the  
3 Company after if the CUT is adopted as it is proposed?

4 A (Mr. Addison) Is there any risk?

5 Q Any risk associated with changes in volumes?

6 A (Mr. Addison) Not related to these classes,  
7 related to volumes inside the CUT. But the customers --  
8 Of course, we are only talking about margin revenues;  
9 that's a very small component of the cost to the customer.  
10 The vast majority of the current bill to the customer,  
11 approximately 80 percent, is related to the cost of gas.  
12 And that's not subject to the CUT mechanism.

13 Q Now, the Commission has periodic requests for  
14 increases and sometimes decreases associated with the  
15 costs of gas. And when those come in, sometimes the  
16 concern goes out, the Company is raising rates  
17 considerably. And it seems to me the explanation is  
18 usually given that this is something that's a wash to the  
19 Company, the gas cost component, that the Company doesn't  
20 make profit on the gas part of it and it's passing along  
21 the cost of its expenses; is that right?

22 A (Mr. Addison) Yes, I agree with that. Assuming  
23 the Commission finds that we've be prudent in our  
24 practices, that is the procedure.

1 Q And so as far as the gas cost component of rates,  
2 that's also something that is not really posing a risk to  
3 the Company in terms of its recovery of profits and  
4 revenues aside from that gas cost pass through; is that  
5 right?

6 A (Mr. Addison) Not historically. But your question  
7 a few questions ago was about the impact on the customer.  
8 And my response is that 80 percent of the impact to the  
9 customer is about the cost of gas. So if they use less  
10 they are going to use less of the cost of gas, too, not  
11 just less of the 20 percent of the margin revenue.

12 Q Uh-huh. And as far as -- Okay. Now at the time  
13 that a CUT increase, we were talking about the increase a  
14 few minutes ago, this mechanism that applies in April --  
15 is it November or October that the --

16 A (Ms. Paton) October.

17 Q It's a little different. At the time that that  
18 rate increment goes into effect, is there any review  
19 about -- that would take into account Public Services'  
20 other expenses or the rate of return at the time?

21 A (Ms. Paton) No. The CUT mechanism is simply going  
22 to look at a true-up of the usage.

23 Q Okay. It doesn't look at whether Public Service  
24 added customers or not in that evaluation?



1 A (Ms. Paton) The calculation applies to all the  
2 customers that are billed each month of the deferral.

3 Q So it does look at the customers that are added --  
4 I will come back to that. It doesn't look at the whether  
5 there was increased or decreased use by other classes of  
6 customers at the time; right? It's focus is on that one  
7 component of rates, the usage component?

8 A (Ms. Paton) The usage for the residential and  
9 commercial classes.

10 Q And so it is possible, is it not, that Public  
11 Service could be exceeding its authorized rate of return  
12 as the time that it comes in and asks for the increment  
13 for the CUT and that wouldn't be taken into account?

14 A (Ms. Paton) Theoretically, yes. I believe the  
15 Commission's own reports for the last several years have  
16 showed that we have not come close to earning authorized  
17 returns. But, hypothetically, yes.

18 Q And there is nothing in the tariff that would cap  
19 the amount that rates can increase as a result of the cap,  
20 is there?

21 A (Ms. Paton) No, ma'am.

22 Q I'm going to talk a couple minutes about declining  
23 per-customer consumption. Now, I will submit to you -- If  
24 you look back at the Stipulation Exhibit B on Page 1 and

1 compare that to what is shown at the top part --

2 MS. FORCE: I'm sorry. I request that this be  
3 marked as premarked on the sheet, Attorney General  
4 Cross-Examination Exhibit No. 2.

5 COMMISSIONER JOYNER: That's allowed.

6 (Whereupon, Attorney General CX Exhibit No.  
7 2 was marked for identification.)

8 Q -- If you take a look at the Stipulation Exhibit  
9 B, and compare that to what is shown at the top of this  
10 exhibit, all but the right two columns reflect what  
11 appears on Exhibit B as the operating revenues under  
12 Stipulated rates. And it's the margin revenues from the  
13 volumetric charges. If you look for residential, the  
14 number of bills should match up; the number of dollar a  
15 month for the facilities charge is \$10 per month; the  
16 number of therms; the total -- the Column marked the total  
17 dollars per therm, I believe that is showing what appears  
18 in Exhibit B. That includes the energy components?

19 A (Ms. Paton) Yes, ma'am. I believe through the  
20 column that you have labeled, Total Revenues agrees to  
21 Exhibit B of the Stipulation.

22 Q Okay. And the two columns that are at the far  
23 right that are in bold are added. And I submit to you  
24 that the margin dollars per therm, that's the same number

1 we were talking about earlier on your Exhibit D that's the  
2 "R" value in this case for residential customers?

3 A (Ms. Paton) Yes, ma'am, that's correct.

4 Q And if you multiply that "R" value times the  
5 number of therms that are shown in the fourth column,  
6 that's where you would come up with what's represented  
7 there as the volumetric charge from revenue -- margin  
8 revenues?

9 A (Ms. Paton) Yes, ma'am. Again, subject to  
10 checking the math.

11 Q Okay. That's broken down into Winter and Summer  
12 rates as is done in Exhibit; is that correct? Do you see  
13 where it's broken down?

14 A (Ms. Paton) Yes, ma'am.

15 Q Now, if you look down at the bottom part of that  
16 Exhibit, there is a chart that uses some of those same  
17 numbers. Focus on year 1 for residential customers,  
18 Winter and Summer. If you look, the number of bills  
19 matches the number of bills at the top of the page. And  
20 the number of therms also matches the column at the top of  
21 the page. The third column, the Therms Per Bill, that's a  
22 computation that I will ask you to take subject to check  
23 that divides the therms by the number of bills.

24 A (Ms. Paton) Okay. I will accept subject to check.

1 Q So that would show how many therms are associated  
2 with each bill under -- just by simple math calculation.  
3 The next column, again, is the volumetric charge for  
4 margin. And the column after that shows a computation of  
5 therms per bill times that charge, which is a computation  
6 that I ask you to take subject to check?

7 A (Ms. Paton) Yes, ma'am.

8 Q One of the checks would be if you take that column  
9 showing the volumetric margin per bill and multiply it  
10 times the number of bills, you come back to the same  
11 volumetric margin revenues as is shown at the top. Do you  
12 follow me?

13 A (Ms. Paton) Yes, ma'am.

14 Q That 85,257,175 matches up to the top volumetric  
15 charge. Now, in year 2 there's an adjustment that assumes  
16 4 percent growth in bills. So if you look at the number  
17 of bills in year 2, and compare Winter bills 2,652,371 to  
18 the Winter bills in year 1, I submit to you that that's a  
19 4 percent increase. And doing the math using the same  
20 volumetric margin revenues per bill, it shows an increase  
21 in the volumetric revenues in year 2. And that increase  
22 is 4 percent. Do you follow me?

23 A (Ms. Paton) Yes, I see it. And, again, while  
24 you've got the increase in the number of bills, you also

1 have increase in costs associated with those bills.

2 Q And that's not reflected here. We are just  
3 looking at revenue here.

4 A (Ms. Paton) Looking at revenues.

5 Q Okay. And if this is -- Am I correct in my  
6 understanding that if this were to occur under the CUT  
7 mechanism when you make the adjustment at the end of the  
8 month, what you're looking at is the actual revenues that  
9 have come in from the customers, and comparing it to this  
10 88,667,462 number as being what's assured under the CUT;  
11 right? You don't look back to --

12 A (Ms. Paton) No. You compare based on the total  
13 number of bills, which in your example here is 2.6 million  
14 for the Winter season. And so whatever volumes are  
15 associated with those bills is what is compared to the  
16 calculated therms per bill that you have shown in year 1.

17 Q Okay. Let's go through that one more time. When  
18 you're making the CUT calculation of what should be  
19 deferred, you look at what you've determined as the actual  
20 revenues that were collected from customers in that month;  
21 right?

22 A (Ms. Paton) Correct.

23 Q And you compare that number to -- Do you compare  
24 that number to what was approved in the rate case, the

1 eighty-five million, two hundred fifty-seven thousand  
2 number or do you compare it to the number that represents  
3 how many customers were served in that month times that  
4 volumetric?

5 A (Ms. Paton) You are going to compare it in your  
6 example here to the, again, on the year 2 residential  
7 Winter season to the 88 million. It's the same number of  
8 customers going into both calculations; number of  
9 customers and the actual margin we collected versus the  
10 actual number of customers times the margin approved in  
11 the rate case.

12 Q Okay. When you look at how much revenue is  
13 expected in the second year, it's going to go up; right  
14 because -- assuming you've added customers?

15 A (Ms. Paton) Adding customers, yes.

16 Q I think you would contend also that the  
17 consumption wouldn't necessarily go up a like amount if  
18 they're using less per customer?

19 A (Ms. Paton) That's correct. And the number of  
20 customers may have gone up, but history has shown that the  
21 use per customer has been declining.

22 Q But it's true, isn't it, that when you do the CUT  
23 comparison, you don't use the total revenues -- you don't  
24 go back to the revenues that were used in the rate case --

1 you go to those revenues in the rate case plus additional  
2 revenues associated with new customers. That's what you  
3 expect.

4 A (Ms. Paton) I may have lost track of you, but what  
5 you are comparing each month is based on the number of  
6 customers billed in that month, how much did they actually  
7 consume versus what is the normalized level of consumption  
8 for that class of customers.

9 Q Uh-huh. And so what you are comparing is how much  
10 they actually consumed per customer?

11 A (Ms. Paton) Yes.

12 Q So, if you have an increase in customer growth --  
13 an increase in the number of customers you are serving,  
14 then you would expect that your revenues under the CUT  
15 mechanism, you are going to be expecting the revenues to  
16 go up a like amount?

17 A (Ms. Paton) Yes.

18 Q And so when you make the comparison to what the  
19 actual revenues were from that volumetric charge that  
20 month, you are not comparing it to what's reflected on  
21 your Exhibit B as 85,257,000, it's increased for growth?

22 A (Ms. Paton) Yes. Again, you are comparing based  
23 on the number of customers each month that actual versus  
24 the normalized consumption.

1 Q Okay. Is this -- Recognizing that you haven't had  
2 an opportunity to check the computations, but isn't it  
3 true that the dollar amount for that number of customers  
4 would be that you'd be using to compare to what your  
5 actual revenues from those customers are, would be  
6 88,667,000?

7 A (Ms. Paton) Subject to checking the math, that  
8 would be the normalized level of revenue that we would  
9 then compare to the actual revenue based on whatever the  
10 actual sales volumes were.

11 Q Okay. In year 3, again, it's a 4 percent growth  
12 in the number of customers served, you'd have growth to  
13 the number of customers served in year 2. It would  
14 increase the expected revenues under the CUT, again; is  
15 that right?

16 A (Ms. Paton) Yes, ma'am.

17 Q Now, is it fair to say when we look at the  
18 projected volumes in the rate case that even though there  
19 was per-customer decline according to your testimony in  
20 the usage over time that the total normalized revenues  
21 have increased for residential customers?

22 A (Ms. Paton) Yes, that's correct.

23 Q So, if we look at Paton Exhibit 8, which is your  
24 initial testimony, if we look at the far column in Paton



1 Exhibit 8, that shows growth adjusted therms, and there's  
2 actually an increase in the amount of therms you are  
3 expecting from the residential class. In the Summer it's  
4 40.7 million with the increase; is that right, up from  
5 39.1 million? Is that accurate?

6 A (Ms. Paton) That growth adjusted from the number  
7 of customers.

8 Q Okay. Because you are projecting an increase in  
9 the number of customers you serve, you are also projecting  
10 an increase in consumption?

11 A (Ms. Paton) Yes. I think if you compared the  
12 normalized consumption in the previous box there, that  
13 normalized consumption per customer has decreased since  
14 our last rate case. But what we have done in that final  
15 box is to recognize just growth in the number of customers  
16 up through June of this year.

17 Q Okay. Is it fair to say that the Company's  
18 experienced strong growth in the number of customers  
19 served?

20 A (Ms. Paton) I would say that the North Carolina  
21 and the southeast in general has seen better growth than  
22 the rest of the country.

23 Q So why you have talked about it in testimony this  
24 decreasing per customer consumption, you can still be

1 experiencing overall growth in the volume sold to the  
2 class?

3 A (Ms. Paton) That's correct, growth in the volumes.  
4 And, again, we have the growth in the plant that we've had  
5 to put in the ground to serve those customers, the  
6 expenses that we incur to serve those customers as well.

7 Q Those are all factors that go into it; isn't that  
8 right?

9 A (Ms. Paton) Correct.

10 A (Ms. Addison) If I might add, they are not only a  
11 factor, they're a critical factor. In my summary of  
12 testimony, subject to check, I think we have grown about 7  
13 percent over the last two years. But our rate base has  
14 increased 19 percent. So the cost of serving those new  
15 customers is substantially more than the cost of serving  
16 an average existing customer because the incremental cost  
17 of new pipe compared to the old pipe. So it's a more two  
18 to one factor in the near term in serving those. So it's  
19 essentially, until you come back in for another general  
20 rate proceeding before you are made whole on those new  
21 customers. So it's a major factor.

22 Q Okay. I'd like to talk about for a few minutes  
23 about decoupling and energy conservation. Dr. Wright, you  
24 talked about revenue decoupling in your testimony, did you

1 not?

2 A (Dr. Wright) Yes.

3 Q The CUT is a revenue decoupling mechanism; is that  
4 right?

5 A (Dr. Wright) Yes.

6 Q You testified that a reason to adopt the revenue  
7 decoupling mechanism is it removes the recovery of  
8 revenues from being dependent on sales volumes, removing  
9 the disincentive and the current scheme for the utility to  
10 encourage conservation; is that right?

11 A (Dr. Wright) Are you reading --

12 Q That's on Page 5.

13 A (Dr. Wright) I'll accept that. I was not reading  
14 along with you.

15 Q Pull up your testimony. But you can check that on  
16 Page 5. In other words to the extent that revenues and  
17 profits are recovered in the volumetric rates, a utility  
18 recovers more profit when it sells more and that provides  
19 a disincentive to promote conservation. Is that the  
20 argument essentially?

21 A (Dr. Wright) I'm sorry. Where are you on Page 5?

22 Q I'm not reading that, sorry.

23 A (Dr. Wright) I was trying to get to Page 5.

24 Q Do you want to see where I was quoting from

1 before?

2 A (Dr. Wright) Yes, please.

3 Q Okay. I will learn to put down the line number  
4 next time. Dr. Wright, I am sorry. Essentially though --  
5 Let's go and not characterize it as your quote, would you  
6 agree that it's your testimony that basically revenue  
7 decoupling takes away the recovery of revenues from being  
8 dependent on sales volumes and thereby removes the  
9 disincentive to encourage energy conservation?

10 A (Dr. Wright) I think that is true. But I think  
11 more importantly it decouples the margins that the Company  
12 is getting so that takes away the disincentive.

13 Q I am sorry that term has always confused me. What  
14 do you mean when you say "decouples the margins"?

15 A (Dr. Wright) Well, it's -- many people consider it  
16 the same. But the margins the Company is recovering in  
17 the revenue portion they recover the cost of gas and they  
18 recover a fixed portion and they recover the margins. So  
19 if you look at their total revenues, you are not  
20 decoupling their cost of gas. What you are really  
21 decoupling is this portion.

22 Q Oh I see. I'm sorry. You are talking about -- we  
23 are not talking about applying this to the cost of gas?

24 A (Dr. Wright) No. I just need to make that

1 distinction since 80 percent of the revenues are  
2 attributable to the cost of gas.

3 Q Right. That's important. And from the Company's  
4 perspective isn't it also true that the bread and butter  
5 for the Company is in the margin component?

6 A (Dr. Wright) Yes.

7 Q The cost of gas part of it is a wash to them;  
8 right?

9 A (Dr. Wright) That's true.

10 Q So when we are talking about the design of the  
11 recovery of margins that is where the Company really feels  
12 the pain or benefits from the structure and the recovery  
13 of those revenues?

14 A (Dr. Wright) That's true.

15 A (Mr. Addison) Generally, but we are not  
16 indifferent to the cost of gas. I mean, certainly you  
17 mentioned some factors earlier about impact on demand when  
18 customers experience high gas prices. So we just like  
19 customers certainly rather gas prices be lower. So we are  
20 not indifferent. And it's better for other classes that  
21 even if approved, this tracker would not apply to  
22 industrial customers, et cetera, and would be better for  
23 the economic development of the area in general. So we  
24 are certainly not indifferent to the prices.

1 Q I am not sure I followed the second part of that.  
2 You mean it would be better for them if they also had a  
3 decoupling mechanism?

4 A (Mr. Addison) No. I'm saying the lower gas cost  
5 in general are better for all customer classes for those  
6 who might use alternative fuels or those who might,  
7 otherwise, shut down US operations and move  
8 internationally.

9 Q So you are not indifferent where gas prices go  
10 even in if this mechanism is in place. That's what you  
11 are saying; right?

12 A (Mr. Addison) Absolutely.

13 Q But going back -- To put it another way, to the  
14 extent that revenues and profits are recovered in  
15 volumetric rates through the margin rates, the utility  
16 recovers more profit when it sells more volumes and that  
17 provides a disincentive to promote conservation. Is that  
18 essentially the argument?

19 A (Dr. Wright) You are talking without a CUT  
20 mechanism?

21 Q Yes?

22 A (Dr. Wright) Okay.

23 Q The CUT addresses that concern about volumetric.

24 A (Dr. Wright) Yes, the CUT does that. What you see

1 with utilities, and we've had this for a number of years  
2 and, in fact, this Commission recognized it when I was a  
3 Commissioner when we were adopting integrated resource  
4 planning on the electric side. And that is there is a  
5 natural disincentive for electric or gas utilities to  
6 actively and aggressively promote conservation when, in  
7 fact, that can reduce their sales and potentially reduce  
8 their profits. So this CUT mechanism removes that  
9 disincentive.

10 Q Now, there's some other mechanisms for addressing  
11 that incentive for utilities to get involved, aren't  
12 there? Are the electric utilities -- You do expert work  
13 for electric utilities, too, don't you, Dr. Wright?

14 A (Dr. Wright) Yes.

15 Q And are electric utilities promoting decoupling as  
16 way to encourage energy conservation programs?

17 A (Dr. Wright) I have not testified on that on the  
18 electric side. I've seen it primarily in gas is where  
19 I've primarily seen it. I don't remember seeing it or  
20 testifying on it.

21 Q Do you know what the position of the electric  
22 companies has been on whether, for instance in North  
23 Carolina, on whether to use decoupling as a way to  
24 encourage conservation?

1 A (Dr. Wright) No. But they have quite a different  
2 situation in terms of usage and in terms of their rate  
3 base and in terms of how much of their fuel is related to  
4 the total revenues. So there are differences there.

5 Q There are differences. And there are differences  
6 in the way demand is going on the electric side, too,  
7 aren't there?

8 A (Dr. Wright) Yes.

9 Q Looks like more growth in recent periods and the  
10 volumetric usage of electricity?

11 A Are you asking me if there is more growth per  
12 customer in kilowatt hour sales on the electric side as  
13 compared to the declining volumes on the gas side?

14 Q Yes.

15 A (Dr. Wright) Yes, I think that is correct; at  
16 least in the southeast.

17 Q Now, according to your argument decoupling removes  
18 the disincentive but there still is an incentive; right?  
19 It's more of a neutralizing effect that decoupling would  
20 have?

21 A (Dr. Wright) I am not sure how you would  
22 characterize neutralizing. I think what it does, from my  
23 perspective, is it more closely aligns the shareholder and  
24 the customer interest, as well as the policy of the state



1 to all promote conservation absent the decoupling  
2 mechanism. As I just stated there is not a strong  
3 incentive for the Company to promote conservation measures  
4 with decoupling. They can strongly promote that.

5 And it's in the Company's best interest to be  
6 more closely aligned with their customers' interest and  
7 the State policy. And as we all do a better job of energy  
8 efficiency, if we can help reduce the volatility or reduce  
9 natural gas prices, then it will benefit our customers.  
10 It will benefit the Company. It will benefit the State.

11 Q And your argument though, you're not saying that  
12 the revenues of the Company are going to up because of  
13 energy conservation. They just won't go down; isn't that  
14 true?

15 A (Dr. Wright) The margins --

16 Q Let me clarify. When the Company sponsors a  
17 program, there is not an incentive that you are talking  
18 about here that you are removing that disincentive of  
19 reduced margins?

20 A (Dr. Wright) Well, actually, the Company does have  
21 an incentive to promote these programs. I was involved in  
22 some of their discussions on what demand side initiatives  
23 to undertake. And the Company did at least two  
24 Company-specific surveys and they had some national

1 surveys that they were looking at. And one thing they  
2 found was their customers thought it was very important  
3 for the Company to not only be environmentally conscience  
4 but to also be promoting conservation as part of that. So  
5 it is really in the Company's best interest to be aligned  
6 with what their customers want and desire. So I think it  
7 is in the Company's interest to promote it.

8 Q Just in terms of public relations or corporate  
9 relations with the community then, it's another reason why  
10 the Company would want to promote?

11 A (Dr. Wright) Yes.

12 Q Now your argument that decoupling removes the  
13 disincentive for programs that will promote conservation  
14 assumes, does it not, that less use of natural gas means  
15 energy is used more conservatively; that you're achieving  
16 consumption -- you are achieving conservation -- if you  
17 use less natural gas?

18 A (Dr. Wright) Well, my argument assumes that if  
19 they adopt these conservations measures whether they are  
20 promoted by the Company or whether they just adopt them  
21 themselves, the customers adopt them, that they are going  
22 to use less natural gas and conserve energy assuming they  
23 get the same value in terms of the benefits they achieve  
24 from natural gas.

1 Q I am going to submit to you that Mr. Frank Yoho  
2 used to be with Public Service and is with Piedmont now  
3 testified in South Carolina that it's more efficient to  
4 use natural gas water heaters than it is to use electric  
5 water heaters, especially in the Summer time when natural  
6 gas is used on the margin to produce electricity.

7 And just conceptually, it makes sense that when  
8 you produce electricity and using natural gas and then  
9 send it over transmission lines, distribution lines to the  
10 users that more energy is consumed than if the user uses  
11 the natural gas directly. Would you disagree with his  
12 argument or with that contention?

13 A (Dr. Wright) I have heard those claims. I would  
14 imagine that if I look back in all my notes somewhere, I  
15 would probably have claims on the other side. So I am not  
16 going to argue --

17 Q Do you want to take a position on that?

18 A (Dr. Wright) No.

19 Q Okay. But isn't it possible, for instance, we  
20 were talking a little while ago about the possibility of  
21 consumers using natural gas to fuel automobiles. Wouldn't  
22 that provides some perhaps energy conservation and also  
23 some environmental benefit from increased use of natural  
24 gas?

1       A       (Dr. Wright) Yes. But you have to understand that  
2       is one of the good things about the Customer Usage Tracker  
3       mechanism and that is if customers do adopt these new  
4       programs and use more natural gas, the Company's margins  
5       are not going to be increased. Without the Customer Usage  
6       Tracker, if you had a lot of natural gas vehicles that  
7       came on the road, then the Company would see their margins  
8       increase; they would see additional revenues; and the  
9       Company would keep all those additional margins. With the  
10      Customer Usage Tracker, it's a very symmetrical thing. So  
11      if -- We had been talking about the fact that usage is  
12      going down and declining and it adjusts for that. It also  
13      adjusts for the other way if usage goes up on a  
14      per-customer basis. So it's a very symmetrical thing.  
15      And that's one of the benefits to it.

16      Q       So consumers would see a benefit if the  
17      consumption per customer goes up under the tracker because  
18      of some load-growing developments in natural gas?

19      A       (Dr. Wright) Well, they would certainly see a  
20      benefit in that their rates would not be increased or, in  
21      fact, the rates would be declining on a per-therm basis  
22      because the margin would be declining. I think Ms. Paton  
23      can explain how it works better than I can. But it's a  
24      symmetrical thing so that if the usage goes up, the

1 Customer Usage Tracker will adjust the margins so that the  
2 Company is not recovering more than the standard margin  
3 that was set in the rate case. So the customers do get  
4 that benefit, yes.

5 Q But, now to the extent that you've argued that by  
6 taking away the disincentive that goes through volumetric  
7 rates, the Company is encouraged to engage in energy  
8 conservation programs. It also takes away the other side  
9 of it; there is not as great an incentive to seek new  
10 markets for natural gas for residential and commercial  
11 customers because the Company's indifferent to how much --  
12 at least it's interest is less under the tracker than it  
13 would be, otherwise, isn't it?

14 A (Mr. Addison) No. I disagree with that. Maybe I  
15 didn't understand your question. But essentially at the  
16 end of the day the only way the Company earns margins  
17 return for the shareholders is on rate base. We know that  
18 with every existing customer there is a depreciation  
19 process in place. And that rate base is declining all the  
20 time. So to the extent that we're not growing, our  
21 earnings are going to decline; investors are going to have  
22 little to no interest if that were happening. So it's  
23 absolutely our incentive to expand our customer base to  
24 new customers where it makes economic sense.

1 Q Okay. And the incentive under this mechanism is  
2 very strong to add new customers, isn't it? You are  
3 getting revenues based on how many customers you serve,  
4 isn't that essentially how the --

5 A (Mr. Addison) Under the usage tracker mechanism?

6 Q Yes. If the CUT is --

7 A (Mr. Addison) You know until you mentioned that  
8 that morning, I really had not thought about the dynamic  
9 of the tracker applying to new customers that come on the  
10 system. That's, to me, how insignificant it is for the  
11 new customers. It's more significant for the existing  
12 base of customers that we have and insuring as their usage  
13 volumes vary that we get something approximating the level  
14 that this Commission granted in the last proceeding to  
15 give us an opportunity to earn a fair return. It's not so  
16 much about those new customers.

17 The thing that, as you'd know from my earlier  
18 response, that pulls on me about new customers is that  
19 response to put the pipe in the ground to serve them.  
20 They costed so much more, and, in my roll, to raise the  
21 money to do it.

22 Q But now your rates are set so that providing  
23 you're getting this amount under this new rate design per  
24 customer, per month, then, you are encouraged to add

1 customers whether they use a large amount of natural gas  
2 or a small amount of natural gas because you get the same  
3 revenue whether they are a large customer or small  
4 customer; isn't that true?

5 A (Ms. Paton) Well, I think just to follow up on  
6 what Mr. Addison said was that adding new customers it  
7 costs us more to add that new customer. Yet we will be  
8 collecting margin revenue based on our embedded costs to  
9 serve our existing customers. So while we will get more  
10 margin per customer, if you were to determine what your  
11 cost to serve that new customer was, it's most likely  
12 higher than the margin revenue you are going to collect.

13 Q Okay. Take a look --

14 A (Dr. Wright) If I can -- I think -- You are  
15 somewhat mixing what I would consider a short term and  
16 long term view. When a utility is looking -- if they want  
17 to look at next quarter's earnings, and that's all they  
18 were concerned about, then as Mr. Addison has said, if  
19 they add new customers and their margin on those new  
20 customers is based on these old customers and it costs  
21 more to add those new customers than the old customers,  
22 then the Company would not be necessarily real excited  
23 about adding those new customers because it actually will  
24 reduce their earnings. Now that's a very short term

1 perspective.

2 But over the long term, which is what I hope Mr.  
3 Addison and his management group are looking at. When you  
4 are looking at the long term situation with your utility,  
5 it is incumbent upon you to build out your system as much  
6 as possible, to serve as many customers as possible, and  
7 to provide as much gas as they need. And so from a long  
8 term perspective, the Company needs to grow; they need to  
9 add customers; they need to grow their rate base. That is  
10 how the Company is able to prosper and get Wall Street, I  
11 guess, interested as Mr. Addison said. So over the long  
12 term, they have to do this.

13 Q Okay.

14 A (Ms. Paton) I just want to add that I hope I  
15 didn't imply that we don't want new customers because we  
16 do. If we go back to the natural gas vehicles that we  
17 hope take off, we would anticipate this going to add  
18 non-peak load. And to the extent that we add non-peak  
19 load, in future rate cases we have more volumes to spread  
20 our costs over, and it will serve to lower rates for all  
21 customers.

22 Q Okay.

23 A (Mr. Addison) I think what we may be missing in  
24 this whole discussion is this usage tracker is really in



1 my terms and not anyone else's here is really meant to be  
2 a bridge between general rate proceedings. If the  
3 Commission set a certain level to allow us the opportunity  
4 to earn a return at a level that we agreed upon, which  
5 we've at least the parties here have stipulated upon and  
6 hope the Commission approves, this gives us a better  
7 opportunity to earn that between general rate proceedings,  
8 which historically occurred every few years. This is a  
9 bridge mechanism. It's still going to decline. There's  
10 still going to be regulatory attrition because it costs  
11 more to serve the new customer. We are very glad to be in  
12 a great growing part of the country. But this is just a  
13 bridge to get from one to the other. It's not a long term  
14 mechanism to make more off adding new customers or  
15 something like that. You are still going to, in a growing  
16 economy and inflationary period, not be earning your  
17 allowed return.

18 Q Now, one of the things I think you alluded to is  
19 the cost of adding a customer. If you're in a situation  
20 where the Company has added quite a bit of backbone before  
21 the rate case, in other words, transmission that goes into  
22 a new unserved area and then later is adding more what you  
23 call infield customers, then there's a change in the cost  
24 per customer that is affected by that sort of development;

1     isn't that true?

2     A           (Mr. Addison) That's true theoretically. And a  
3     system that's as mature as ours, the impacts of those, I  
4     don't believe, have been very large at any one point in  
5     time. But theoretically, I agree with you.

6     Q           Okay.

7     A           (Dr. Wright) There is another point that we are  
8     missing here, that's overriding this whole discussion of  
9     adding customers, and that is the utility has an  
10    obligation to serve. So that is quite important. And the  
11    utilities in North Carolina, South Carolina take it very  
12    seriously when customers move into their service territory  
13    that they provide service.

14   Q           Dr. Wright, I'm looking on Page 5 of your  
15   testimony again. And I think you say there that declining  
16   use per customer will continue because new homes are  
17   better insulated than most homes currently served; is that  
18   -- that falls around Line 19.

19   A           (Dr. Wright) Well, yes.

20   Q           Isn't it true that although new homes are better  
21   insulated they tend to be larger than the homes that were  
22   built 20 years ago?

23   A           (Dr. Wright) Yes, as a general rule.

24   Q           And they tend to use more gas than houses built in

1 the '70s and '80s?

2 A (Dr. Wright) I don't think that's true. I  
3 actually did a study for the Company a couple years ago  
4 where I looked at the declining usage and part of that  
5 review looked at surveys and other data, for example -- I  
6 forget all the data sources I looked at, but both on a  
7 national and regional level. And it is my impression from  
8 what I remember from that review was that the average use  
9 per household, because of the new efficiency standards --  
10 and it may be a combination of both -- the better  
11 insulation and better gas furnaces was actually declining  
12 slightly; even though the home size was going up.

13 Q If you look at a home that is on a 2-acre lot and  
14 that has 100-gallon water heater and is much larger than  
15 houses that were built ten years earlier, it's likely that  
16 even though it's better insulated, it may result in more  
17 consumption -- I guess the equivalent of a home of a  
18 hummer on the road; that's happened in the '90s.

19 A (Dr. Wright) Well, I mean, it's certainly  
20 possible. But what I'm saying is just the overall look at  
21 the customer usage assuming the same appliance load, it is  
22 going down. As we build these new homes and as we build  
23 homes that meet new efficiency standards along with those  
24 appliances, I do believe they are using less gas than the

1 old homes built 20 and 30 years ago.

2 Q You are talking about the building code standards  
3 that have been adopted and appliance standards and that  
4 kind of thing to make them more efficient?

5 A (Dr. Wright) That plus the fact that customers  
6 themselves may want to insulate those bigger homes a  
7 little better. I know in Atlanta, Georgia when you go out  
8 and you look in these new subdivisions, one of the selling  
9 points that these builders like to point out is how much  
10 insulation they have or how efficient the HVAC system is.

11 A (Ms. Paton) If I could just elaborate on what Dr.  
12 Wright has said that one of the advantages of the Customer  
13 Usage Tracker mechanism is that to the extent that these  
14 new homes do have more gas appliances and therefore more  
15 consumption under this CUT mechanism, we will still adjust  
16 back to the normalized levels set in this case. So if  
17 you've got some customers that are tending to drive that  
18 average up, it's going to reduce the impact of that CUT  
19 adjustment because you are adjusting back to the lower  
20 normalized level.

21 Q And you are looking at the class as a whole when  
22 you --

23 A (Ms. Paton) The class as a whole.

24 Q On Page 8 of your testimony, Dr. Wright, you say

1 that the CUT allows customers to continue to realize  
2 savings in their total gas bills associated with lower gas  
3 consumption. And the CUT would increase rates to the  
4 extent that less gas is used, though; right?

5 A (Dr. Wright) It could. But they could also  
6 realize savings if they lower their gas consumption. Even  
7 if your rate goes up a slight amount if you're consuming  
8 less if you put in these new appliances and are consuming  
9 less, then you will probably generally see a rate decrease  
10 or bill decrease. I'm sorry.

11 Q You also say that the CUT eliminates the need for  
12 the weather normalization adjustment; that that's one of  
13 the benefits. Let's run through some of the similarities  
14 and differences between the CUT and the weather  
15 normalization adjustment. The WNA applies to the same  
16 class as the customers; isn't that right, residential and  
17 commercial?

18 A (Dr. Wright) Yes. Now, I will say if you get into  
19 how the mechanism works you may leave my knowledge and get  
20 to Ms. Paton briefly.

21 Q Okay. And it applies to the margin not to the gas  
22 cost?

23 A (Ms. Paton) That's correct.

24 A (Dr. Wright) Yes.

1 Q It applies only during Winter months though;  
2 right? Not year round?

3 A (Dr. Wright) Yes, I think that's correct.

4 Q So the CUT is more broad in that regard. The WNA  
5 makes an adjustment relating to the difference between the  
6 normal weather and the actual weather that's experienced  
7 in the month; is that right?

8 A (Ms. Paton) That's correct.

9 Q So when you make an adjustment under the WNA, that  
10 shows up in the bill the same month, does it not?

11 A (Ms. Paton) Yes, it does.

12 Q And as far as what's counted, we have already  
13 talked about the WNA is weather and the CUT plus any  
14 changes that affect consumption?

15 A (Ms. Paton) Correct.

16 Q Now, the first Winter the CUT won't impact rates;  
17 right, because there won't be an adjustment until April 1?

18 A (Ms. Paton) That would be correct, yes.

19 Q So anything that occurs during that Winter is  
20 going to be deferred and won't show up until later  
21 periods. So in the second year, then, depending on what  
22 the weather is like, customers are going to be paying for  
23 that year plus in part, their rates are going to be  
24 affected by what happened the year before; isn't that

1 right?

2 A (Ms. Paton) Well, we have proposed adjustments  
3 every six months, which would -- part of the reason is to  
4 smooth out the impact of any adjustments. We don't want  
5 one big upward or downward adjustment. What we are trying  
6 to do is to keep rates as stable as possible for our  
7 customers.

8 Q Okay. And I think weather normalization  
9 adjustment has been characterized as revenue neutral over  
10 time; isn't that right? At least ideally I think you said  
11 there's some problems that can occur with that. Some  
12 year's weather is colder than normal and other years it's  
13 warmer?

14 A (Mr. Addison) Yes, that's the theory behind the  
15 normalization adjustment. But it's difficult to design  
16 those that completely mirror the weather and completely  
17 tie the consumption patterns and the weather together in a  
18 linear fashion. So, in layman's term, if it's extremely  
19 cold, and I've seen this the few months its been extremely  
20 cold in the past few years, our earnings will be slightly  
21 higher than we had forecasted. If it's extremely mild,  
22 which I have seen much more often, the weather  
23 normalization doesn't make up for all its that it's  
24 intended to make up. So it's just not -- in those

1 extremes on either end it doesn't work in practice like  
2 it's designed in theory.

3 Q Okay. And as far as the CUT goes, you are -- we  
4 talked earlier about you are increasing the amount of  
5 revenue that is expected by the number of customers that  
6 you add. So if the trends continue that you are adding  
7 customers, there is an expectation that revenues will also  
8 grow; isn't that right?

9 A (Mr. Addison) Our revenues and costs.

10 Q You expect your costs will go up?

11 A (Mr. Addison) Yes, I do.

12 Q Because of the new customers?

13 A (Mr. Addison) Right. Exactly. And because of  
14 existing customers because of inflationary pressures on  
15 all of our costs in all of our businesses.

16 Q Okay. Dr. Wright, you have also said that the CUT  
17 is good for PSNC's financial health, which will help the  
18 Company upgrade and expand its system. I think we have  
19 been talking about that. In other words, it helps with  
20 the growth you are expecting and basically with your  
21 revenue and return.

22 A (Dr. Wright) Well, that's your words. I mean, I  
23 would agree to some extent it does.

24 Q You said that the CUT may help extend the time



1 between rate cases, which is time and resources of the  
2 Company and the Commission. There will be fewer rate  
3 cases under the argument, but there will still be rate  
4 changes; isn't that right?

5 A (Dr. Wright) There will be both rate cases and  
6 rate changes.

7 Q But the rate changes will be more frequent than  
8 they would be without.

9 A (Dr. Wright) Actually, I think maybe the weather  
10 normalization changes every month for six months, and this  
11 will be twice a year.

12 Q From that stand point, there is advantage; the  
13 changes will be more substantial depending on how things  
14 go. But --

15 A (Dr. Wright) I'm not sure they will be more  
16 substantial, but they will be less frequent. And  
17 understand this: The weather normalization adjustment, I  
18 can recall as my time as Commissioner was one that always  
19 brought us a lot of complaints, particularly if you had a  
20 warm January and your customers thought they used less gas  
21 and then they saw this WNA and they are wondering what  
22 happened? So it's not that the weather normalization was  
23 certainly not in a perfect situation.

24 A (Ms. Paton) If I can just expand on that, it would

1 be possible with just the WNA. I will grant, perhaps not  
2 likely, but you could have over a six month period very  
3 warm month, very cold, very warm, and the customers are  
4 going to see their bills jumping up, jumping down. And  
5 the CUT mechanism is going to smooth that out and it could  
6 be over a full Winter period that the net impact would be  
7 relatively small. So the impact on the customers bills,  
8 at least, would be once or twice a year and not as  
9 drastic.

10 Q Now, I don't want to play advocate for the WNA too  
11 much, but isn't it true that in a month when weather is  
12 colder than normal, the customers are likely to get a  
13 credit because they are using more volumes in the colder  
14 than normal weather, and so they are paying more on their  
15 bill to that extent. But then there is a credit because  
16 weather is colder than normal?

17 A (Ms. Paton) Correct.

18 Q So even though the adjustment part of the bill,  
19 the WNA may be larger, the impact on the bill from the WNA  
20 is to offset the change that weather causes and how many  
21 volumes they're using? So the same month you get a large  
22 credit to your bill is the month when it's cold, so you  
23 use more most likely?

24 A (Ms. Paton) Correct. And the converse is true

1 also.

2 Q So the bill actually --

3 A (Ms. Paton) In the warm month you are actually  
4 going to see more added to your bill.

5 Q I agree with you customers don't like to see that  
6 adjustment, but it is at time when often their bills are  
7 lower. So it tends to make the bills a little more even  
8 under the WNA; isn't that true?

9 A (Ms. Paton) Yes, that would be correct.

10 Q Then say if you postpone a year before or six  
11 months before the charge comes in and that's colder than  
12 normal and you had a warmer than normal year the year  
13 before, then you get it twice; right? You are getting it  
14 through the CUT and the usage? If you have a warm year  
15 followed by a cold year and you have a balance that  
16 carries over from the prior year, then the customers are  
17 paying more in the cold year, the second year, for their  
18 consumption that year, plus they are paying a higher  
19 increment left over from the year before?

20 A (Mr. Addison) If I follow -- if we adjust every  
21 six months the difference is going to be collected or  
22 repaid before the next Winter season would come along. Is  
23 that not correct? Is that not the way it's designed?

24 A (Ms. Paton) The rate would be adjusted twice a

1 year, yes.

2 A (Mr. Addison) So it's meant to get that adjustment  
3 passed through before the next heating season comes along.

4 Q Okay. And I guess also one of your points might  
5 be that there's some smoothing effect because one month is  
6 up, the next is down and so you get the benefit of that.

7 COMMISSIONER JOYNER: Ms. Force, how much more  
8 do you have with respect to the WNA CUT comparison? It's  
9 about time that I need a break. If this is a good time,  
10 I'd like to do it.

11 MS. FORCE: This is a good time to break.

12 COMMISSIONER JOYNER: Okay. We will be in  
13 recess for 15 minutes. We will reconvene at 11:30 sharp.  
14 Please be in place and ready at that time.

15 (Whereupon, off the record.)

16 (Whereupon, a brief recess was taken.)

17 (Whereupon, back on the record.)

18 COMMISSIONER JOYNER: Ms. Force, you may  
19 continue.

20 continued CROSS-EXAMINATION BY MS. FORCE:

21 Q Dr. Wright, at the bottom of Page 3, starting on  
22 Line 20, you testify that a high percentage of gas utility  
23 cost is non-commodity based cost that are fixed. And it  
24 is the investment portion of these fixed costs in which

1 the utility earns a return. And then over on Page 4, you  
2 state that recovery of fixed costs -- I am paraphrasing  
3 some -- would generally best be recovered via a  
4 per-customer service charge. But that would result in a  
5 large per-customer charge so states would generally  
6 recover some of portion of this fixed cost through the  
7 volumetric rates. Is that a fair characterization of your  
8 testimony there?

9 A (Dr. Wright) I am trying to read it. But I would  
10 have to say, yes.

11 COMMISSIONER JOYNER: Ms. Force, can you pull  
12 the microphone -- I am sorry, Dr. Wright?

13 MS. FORCE: Is it not coming through?

14 COMMISSIONER JOYNER: You sometimes tend to fade  
15 in and out. If you will pull it a little bit closer.

16 MS. FORCE: Sorry. I moved it during the break.  
17 I apologize.

18 COMMISSIONER JOYNER: I'm sorry, Dr. Wright. If  
19 you need to repeat yourself in light of my interruption --

20 DR. WRIGHT: Oh, I found where she was reading  
21 from, and that's a fair characterization.

22 continued BY MS. FORCE:

23 Q I have a few questions about that. First you said  
24 that a high percentage of non-commodity costs are fixed.

1 But you didn't say that all costs are; is that right?

2 A (Dr. Wright) Yes.

3 Q The CUT collects all of Public Service's non-gas  
4 costs for residential and SGS customers based on the  
5 number of bills; isn't that right?

6 A (Dr. Wright) I think the Customer Usage Tracker  
7 just applies to the margins. I think they still have a  
8 base-fixed cost that the Customer Usage Tracker doesn't  
9 apply to.

10 Q You're right. But now whether it's recovered  
11 through that facilities charge or through the volumetric  
12 charge plus the CUT adjustment, all of it is being  
13 collected through per-customer charges; right?

14 A (Dr. Wright) Well, yes. I mean, it's a  
15 per-customer charge.

16 Q Even the -- not all of the costs are fixed costs  
17 based on a high percentage?

18 A (Dr. Wright) I'm sorry. I don't understand that  
19 question.

20 Q That's okay. It wasn't very well worded. I  
21 apologize. You indicated that there are a lot of fixed  
22 costs. And I think to paraphrase that's the justification  
23 for going to a per-customer charge. But you are not  
24 saying all of the costs are fixed; right?

1 A (Dr. Wright) Not all of the costs are fixed, no.

2 Q By that I mean the margin costs. Is it your  
3 position that fixed costs should always be recovered in  
4 per-customer charges?

5 A (Dr. Wright) No, that's not my position. That's  
6 what I've testified to. If you talk to people who design  
7 rates, an economist, a lot of them will talk about the  
8 idea that you've got variable costs and fixed costs and  
9 they like fixed costs to be fully recovered on a per-  
10 customer basis; and the variable costs so long as they  
11 vary with volumes to be recovered on the volumetric basis.  
12 However, in the regulatory scheme, particularly in the  
13 natural gas industry, because Commissions historically  
14 have not wanted to recover all the fixed costs in a high-  
15 base rate, per customer, they have put some of those into  
16 a volumetric rate. So it depends on if you're talking to  
17 economists who are what I would call a sticklers for a  
18 straight fixed costs variable-type rate formula or someone  
19 who has to live in a day-to-day world and a Commissioner  
20 who says, wait a minute, this isn't right for my customers  
21 or for the customers of this state.

22 Q Isn't it true that there are rate designs other  
23 than straight fixed variable which is allocated fixed  
24 costs to design rates to collect fixed costs for the

1 variable charge --

2 A (Dr. Wright) Yes.

3 Q -- like for instance the United Method or the  
4 Seaboard Method would allocate some of the fixed costs to  
5 the volumetric component?

6 A (Dr. Wright) There are some other methods, yes,  
7 that do that.

8 Q I want to give you a hypothetical to illustrate,  
9 hopefully, some of concepts that might come up: If the  
10 utility has 100 residential customers, and 50 of the  
11 customers use 150 therms per year; 48 each use 900 therms  
12 per year and 2 use 2,000 therms per year. You need  
13 \$360,000 per year to pay the fixed costs associated --  
14 allocated to them. Under the straight fixed variable  
15 design where it's all recovered through fixed charges or I  
16 guess revenues were all recovered on a per-customer basis,  
17 you'd get \$360. I guess that would \$30 per month, per  
18 customer?

19 A (Dr. Wright) I was trying to write down your  
20 example while you were reading it. I didn't get it all  
21 written down.

22 Q Sorry. I would have liked to use a round number  
23 for that, but it doesn't work with 12 months. So I used  
24 \$360,000 per year for a hundred customers. I think that



1 works out to \$30 per month. I guess the point is if you  
2 were to divide that over the customers so that they are  
3 each paying the same amount, that would mean that the 50  
4 customers who use 150 therms per year are paying the same  
5 amount as those WHO use 900 or 2,000 therms per year;  
6 right?

7 A (Dr. Wright) On the fixed basis given your  
8 example, yes, that's correct.

9 Q But if the 50 all live in close proximity to each  
10 other so that there's not as much distance between their  
11 residences, then that would presumably use less  
12 infrastructure to serve those customers; isn't that right?  
13 So in terms of costs, it's not necessarily costing the  
14 same amount?

15 A (Dr. Wright) Assuming that they were all in the  
16 same neighborhood, then I can agree that would be  
17 possible.

18 Q And if the -- Some of the users have been on the  
19 system for 20 years and others are just recently added. I  
20 guess the cost per customer would be different from that  
21 stand point, too; isn't that right, in terms of the  
22 investment that's been put in?

23 A (Dr. Wright) New customers generally cost more  
24 than old customers, that's correct.

1 Q I guess if you look at how come residences would  
2 be using 2,000 therms per year, let's pretend they are  
3 using gas to heat their swimming pools. They would be  
4 paying to Company the same amount as the customer who's  
5 using 150 therms per year. Isn't it true that the  
6 Commissions take into account a number of factors such as  
7 the value that customers have for service and fairness and  
8 looking at methods of differentiating among customers when  
9 they set rate design policies?

10 A (Dr. Wright) They certainly do it on customer  
11 classes. Within a customer class, they can design rates  
12 for different customers, yes.

13 Q For instance, in the residential class, you have  
14 the bulk of the customers that are served by the Company  
15 so that if the customers is paying the same rate across  
16 that whole class, then most of the customers are paying  
17 the same amount without distinguishing based on usage or  
18 other things that might measure their value of the  
19 service; isn't that right?

20 A (Dr. Wright) Well, if all the customers are using  
21 the same amount of gas, they would be paying the same  
22 amount, yes, using your hypothetical.

23 Q And if the customers are using -- If it's a fixed  
24 charge per month like the straight fixed variable

1 approach, then you are charging all the same amount, no  
2 matter how much they are using; right?

3 A (Dr. Wright) If the rates have been designed that  
4 way, yes.

5 Q I'm sorry. It's a little confusing. We are  
6 talking about a CUT that doesn't do that; isn't that  
7 right? The CUT would still allow the customers to pay  
8 based on their volumes, but make the Company receive its  
9 revenues based on how many customers it serves.

10 MS. GRIGG: Madam Chair, if I could interject.  
11 If Ms. Force would ask one question. I am noticing we are  
12 getting several questions at one time. Just if we could  
13 ask the witnesses one question at a time.

14 MS. FORCE: Sorry.

15 COMMISSIONER JOYNER: If you will try that. And  
16 the witnesses don't seem shy at all about indicating that  
17 they need clarification to the question. So if you will,  
18 just one question and give them the opportunity to  
19 respond, that would be great.

20 MS. GRIGG: Thank you.

21 continued CROSS-EXAMINATION BY MS. FORCE:

22 Q Going back, I think, the question is: Commissions  
23 take into account a number of factors when they are  
24 designing rates?

1 A (Dr. Wright) Yes.

2 Q And from your testimony it could be interpreted  
3 that one of the advantage that you're attributing to the  
4 CUT mechanism is that it's a better alternative than  
5 charging all customers the same amount regardless of --  
6 based on that straight-fixed variable rate design; isn't  
7 that --

8 A (Dr. Wright) It is from my perspective as a  
9 Commissioner, I think there are good reasons to go away  
10 from a straight-fixed variable design. So for that  
11 reason, I would say, yes.

12 Q At the bottom of Page 4, you testified that  
13 declining per customer use results in the failure to  
14 "recover fixed costs including margins that were supposed  
15 to be recovered in volumetric rates."

16 A (Dr. Wright) Yes.

17 Q Isn't there economic efficiency if rates are set  
18 that provide the opportunity for revenue recovery and then  
19 leave it to the utility to operate with risks like a  
20 normal business?

21 A (Dr. Wright) Please repeat it. I think I can  
22 agree with you, but if you will repeat that question.

23 Q I'll repeat it: Isn't there economic efficiency  
24 if rates are set that provide the opportunity for revenue

1 recovery and then leave it up to the utility to operate  
2 with risks like other normal businesses? So if consumers  
3 buy more product or use more volumes, the Company sees  
4 more revenue, but has some risks if it sees sales volumes  
5 decline?

6 A (Dr. Wright) That's true in a competitive market.  
7 But in a regulated market what you generally see is the  
8 Commission tries to emulate what a competitive market will  
9 do and allow a company the opportunity to earn a  
10 reasonable return. If you have a situation like we have  
11 in the gas industry right now -- and it's not just in  
12 North Carolina. You see it throughout the nation -- where  
13 you have a declining consumption and you have a rate which  
14 is established which recovers some of the fixed costs in a  
15 volumetric charge, then realistically, and practically  
16 speaking, the day the rates are established in a rate case  
17 for that gas utility, it has no reasonable opportunity to  
18 really recover what it has supposedly been allowed to  
19 recover if you know going in, as we know, that the average  
20 volumetric usage of these customers is going to be going  
21 down. In a competitive market situation you have  
22 different alternatives. In a competitive market if you  
23 saw that situation, you could either advertise more and  
24 try to get the usage back up or you could go in and

1     increase your prices. I mean some companies do that. So  
2     there's a difference between a competitive market and  
3     regulated market where your rates or your prices are  
4     established by the Commission and what you're allowed to  
5     do as established by the Commission. We try to emulate  
6     it, but it's not perfect.

7     Q         To the extent there is a competitive market, the  
8     amount price goes up is affected by the potential that you  
9     lose customers to others who don't raise their charges as  
10    much; isn't that right?

11    A         (Dr. Wright) In a competitive market, that's true.  
12    But the situation and one of the major reasons why we  
13    regulate this industry and some other industries is that  
14    customers often don't have the choices that they may  
15    necessarily have in a competitive market. So it's not  
16    just a simple thing where you tell a customer or someone,  
17    well, we are going to raise the price here when the  
18    customer has no alternative of what to use. So that is  
19    why we regulate this industry.

20    Q         But to the extent there is more risk of recovery  
21    wouldn't that motivate the Company to watch developments  
22    in the market and economize to the extent its needed or  
23    take other measures to respond?

24    A         (Dr. Wright) That is true. But recognize under

1 the Customer Utilization Tracker, that incentive is there  
2 right now for the Company and stays there even if you  
3 adopt this mechanism because if the Company -- you have  
4 already heard Mr. Addison testify -- that their expenses  
5 are going up every year. All you have to do is look at  
6 your medical bills or the cost of gasoline for your car  
7 for any of us to realize that our expenses are going up  
8 every year, so this Company's expenses are going up every  
9 year.

10 So the Company has a real incentive to control  
11 all of those costs because the Customer Utilization  
12 Tracker will not eliminate the fact that if the Company is  
13 not efficient, that their profitability is going to  
14 decline. So they are still incentive very much so to  
15 continue to provide the best service possible at the  
16 cheapest rates or cheapest cost, rather.

17 Q Now, just to be clear if you have the risk on the  
18 Company concerning how many sales volumes they have and  
19 whether that goes up or down, if sales volumes go up, then  
20 they do profit from that; right? For instance if the  
21 weather is cold and there isn't a tracker, then the  
22 Company makes more money that year?

23 A (Dr. Wright) You're right. And that's one of the  
24 positive aspects for the customers on the tracker is that

1 if they do use a lot more gas where you get a lot more new  
2 customers, then you are not going to see the Company  
3 having the opportunity to recover more in margins than  
4 what was established in this case on a per-customer basis.

5 Q Okay. And similarly as we talked about earlier,  
6 if there is some new product that develops, and uses gas,  
7 then the Company would see an upside to that without a  
8 tracker, it's not just a downside?

9 A (Dr. Wright) Yes.

10 Q Now, the revenues from the residential and  
11 commercial classes depend on how many are served when you  
12 take into account the CUT. But the revenues from the  
13 other classes will still be heavily dependent on the  
14 volumes that are used; isn't that right?

15 COMMISSIONER JOYNER: Are you directing that to  
16 a particular witness?

17 MS. FORCE: Anybody that would like to answer it  
18 is fine. Do you want me to repeat the question?

19 A (Mr. Addison) Please. I understood the first part  
20 of the assumption. I did not understand the second part.

21 Q Okay. The revenues from residential and  
22 commercial classes are dependent on how many customers are  
23 served. But the revenues from other classes will still be  
24 heavily dependent on volumes used; isn't that right? And



1 this is assuming the CUT is in effect.

2 A (Mr. Addison) Yes.

3 Q Does this create any incentive on a cold Winter  
4 day to keep those interruptible customers online even if  
5 it means that gas pressure to some other customers is  
6 pretty low, to the customer's -- residential customers --  
7 in the area?

8 A (Ms. Paton) I would say, no. We are going to  
9 operate our system just like we have always. And on the  
10 coldest Winter days, especially for design purposes, we  
11 presume those interruptible customers will be off system.  
12 I do not know the Commission Rule, but we have certain  
13 curtailment criteria that we, under certain circumstances,  
14 those interruptible customers do have to and will be  
15 interrupted.

16 Q When costs are allocated in a rate case, it's the  
17 volumes for residential customers and commercial customers  
18 that are set too high. That doesn't have an impact on  
19 recovery from those customer; right, because you have the  
20 true-up mechanism?

21 A (Ms. Paton) Yes, I would agree with that the rate  
22 design is premised upon several things: First of all,  
23 what is the total margin revenue that we determine should  
24 be collected from that residential class? If for some

1 reason the volumes were set higher than what perhaps they  
2 should have been, the per-therm margin rate will be set  
3 lower and vice versa.

4 If the volumes are, too low, you will have a  
5 higher margin. So at the end of the day, you are going to  
6 be getting back to the margin level that the Commission  
7 deems to be appropriate for that class in a rate  
8 proceeding.

9 Q Now, are there other factors in the ratemaking  
10 formula that are affected by those volumes, too? For  
11 instance, cost allocations? Are there cost allocations  
12 that are based on normal volumes used in a year?

13 A (Ms. Paton) That was a data request response. I  
14 believe we had two allocation factors that have some  
15 component of volumes included in them. And I would just  
16 point out that in this -- we did file a Cost of Service  
17 Study. I'm sure the Staff did their own Cost of Service  
18 Study. CUCA did a Cost of Service Study. The parties did  
19 not ultimately agree on a particular Cost of Service Study  
20 that uses particular allocation factors to allocate cost  
21 among the classes.

22 Q So they might do it differently?

23 A (Ms. Paton) They might do it differently.

24 Q One might use volumes more than another?

1 A (Ms. Paton) Correct. As far as the ultimate Cost  
2 of Service and Rate Design that we all agreed to, I could  
3 not tell you any particular allocation factors used to  
4 allocate costs.

5 Q Okay. In the proposal the fixed gas costs are  
6 partially allocated depending on normal volumes; isn't  
7 that right, in the Cost of Service Study that the Company  
8 did?

9 A (Ms. Paton) What we had proposed for the fixed gas  
10 cost in this proceeding was to hold the allocation  
11 percentages from our last rate base constant. And, again,  
12 that was an agreed-to allocation. That had been  
13 originally filed, yes, as part was allocated on demand and  
14 part was allocated on energy of volumetric.

15 Q That could also affect storage plants -- I guess  
16 that would be a fixed gas costs, storage plant?

17 A (Ms. Paton) The -- What we paid to the storage  
18 facilities is a fixed gas cost. Now, we do have our own  
19 storage facilities that are part of our rate base. But  
20 the fixed gas costs, yes, the storage charges are one  
21 component.

22 Q There are other items in the Cost of Service that  
23 might take into account volumes used by a class; isn't  
24 that so? For instance, the O&M on transmission,

1 distribution, transmission plant -- is that getting into a  
2 level --

3 A (Ms. Paton) You are getting into a level of detail  
4 that I'm sorry, I don't have in my memory and don't have  
5 the work papers up here with me.

6 Q It's okay. I will give up on that. I have some  
7 questions about -- Let me introduce this: Dr. Wright, on  
8 Page 3 of your testimony about decoupling, you gave some  
9 historical information about decoupling and said that it  
10 has been around a long time in California and other  
11 places; is that right?

12 A (Dr. Wright) Yes.

13 Q In North Carolina we've had an experiment going on  
14 with gas decoupling involving Piedmont Natural Gas since  
15 November of '05, have we not?

16 A (Dr. Wright) I believe that is right, yes.

17 Q Did you take look at the experiment in North  
18 Carolina with Piedmont?

19 A (Dr. Wright) I read the original Order. I'm not  
20 sure I read anything other than that. I may have read --  
21 I've read a couple of things. I do remember reading the  
22 original Order and the descents in that case.

23 Q I guess this is more a question for you, Ms.

24 Paton: Is it fair to say that the CUT mechanism that was

1 used in Piedmont's experiment is just about identical to  
2 what's being proposed in this case?

3 A (Ms. Paton) Yes. I did certainly review their  
4 filings and their reports when I was putting together my  
5 proposed report, yes.

6 MS. FORCE: I am going to pass out an exhibit  
7 that I'd like you to look at. I'd ask that it -- I think  
8 that it's already premarked as Attorney General  
9 Cross-Examination Exhibit No. 3.

10 COMMISSIONER JOYNER: It will be so premarked.

11 (Whereupon, Attorney General CX Exhibit No.  
12 3 was marked for identification.)

13 Q I represent to you this is the tariff that  
14 reflects Piedmont's CUT mechanism. Have you looked at  
15 this before, Ms. Paton?

16 A (Ms. Paton) Yes, I have. I will readily admit to  
17 not re-inventing the wheel when we came up with our Rider  
18 C.

19 Q I wouldn't want to come up with a formula that  
20 looks like this. It's pretty complicated coming up with  
21 the definitions. Are there any substantive differences  
22 between the two?

23 A (Ms. Paton) Not that I am aware of. They  
24 certainly have different rate schedules that this is

1 applicable too than we do. And their adjustments are at  
2 different -- Let's see. Their adjustments would be each  
3 April and November. But I believe just in general they  
4 are.

5 Q And the factors that are used are different?

6 A (Ms. Paton) Yes.

7 MS. FORCE: The Piedmont experiment was  
8 establishe4d in the Order approving partial rate increase  
9 and requiring conservation initiatives. That is dated  
10 November 3, 2005, in Docket No. G-9, Sub 499. I'd ask  
11 that the Commission take judicial notice of that Order.

12 COMMISSIONER JOYNER: That will be judicially  
13 noticed.

14 MS. FORCE: In particular I am going to quote  
15 from that. On Page 24, the Order indicated that  
16 Piedmont's CUT was adopted as a three-year experiment and  
17 said, "approving the CUT as an experimental rate for a  
18 limited period of time will allow the Commission to  
19 monitor experience under the formula, including its impact  
20 on the Company's earnings on conservation efforts and on  
21 traditional rate structure." I am calling that provision  
22 to the Commission's attention.

23 Q I am going back to Dr. Wright here. When looking  
24 at decoupling then, did you take a look at how much of an

1 impact Piedmont's adjustment had on the revenue that  
2 Piedmont deferred to recover under the CUT each year?

3 A (Dr. Wright) I have not studied it. I remember  
4 reading something. It may have been that the Attorney  
5 General filed something. But I really haven't studied  
6 that issue.

7 Q Well, I submit to you that Piedmont's tariff  
8 requires the filing of monthly reports that show the  
9 computation of the CUT deferral. And, Ms. Paton, I think  
10 you'd agree that under the proposal that you have for  
11 Public Service, there would be monthly reports required as  
12 well; isn't that right?

13 A (Ms. Paton) Yes, that's correct.

14 Q Those monthly reports are filed with the  
15 Commission in that same Docket, G-9, Sub 499, and the  
16 Attorney General asked that those reports be incorporated  
17 by reference into this record. If you'd like  
18 clarification, I filed a provision in the Statute G.S.  
19 62-65 that allows reports filed with the Commission to be  
20 incorporated by reference.

21 MS. GRIGG: Commissioner Joyner, we question the  
22 relevance of such, and we do not have those in front of  
23 us. So we would object to them being admitted in this  
24 case.

1                   COMMISSIONER JOYNER: How do you respond to the  
2 objection on the basis of relevance, Ms. Force?

3                   MS. FORCE: The relevance question? The reports  
4 that Piedmont has filed in that case reflect how the  
5 experiment has worked in North Carolina. The Commission  
6 expressed an interest in looking at the CUT mechanism in  
7 Piedmont's case as an experiment before it made the tariff  
8 permanent. And it seems to me that's pretty relevant to  
9 the case here where the Commission is considering a CUT  
10 mechanism that's virtually identical.

11                  COMMISSIONER JOYNER: I will -- Do you wish to  
12 be heard?

13                  MS. GRIGG: Well, I was just gonna add that  
14 those are certainly relevant in Piedmont's case, which is  
15 coming before the Commission in a couple weeks. But I  
16 would argue that this is PSNC's case and not relevant to  
17 our case today.

18                  COMMISSIONER JOYNER: I'm going to overrule the  
19 objection. I'm going to grant your request that the  
20 reports be incorporated into the record. To the extent  
21 that additional questions are relevant with respect to the  
22 comparisons, I will allow those. They will be subject to  
23 an objection. But I would note that that's a different  
24 company and that's a different docket. And it is the PSNC



1 proposal that we are interested in. So I would like for  
2 you to focus your comparison questions with that in mind.

3 MS. FORCE: Okay.

4 continued BY MS. FORCE:

5 MS. FORCE: We are passing out two exhibits that  
6 I'd ask be premarked -- be marked as premarked. One is  
7 Attorney General Cross-Examination Exhibit No. 4. The  
8 other is not premarked, and I'd ask that that be marked  
9 for identification as Attorney General Cross-Examination  
10 Exhibit No. 5.

11 COMMISSIONER JOYNER: That will be so marked for  
12 identification.

13 (Whereupon, Attorney General CX Exhibits 4  
14 and 5 were marked for identification.)

15 Q While that is being passed out, I have a question  
16 for you, Dr. Wright. If you were to look at the reports  
17 that were filed by Piedmont, would it surprise you to  
18 learn that the amount between the amount that was deferred  
19 and the amount that was collected during a year amounted  
20 to \$30 million per year in deferrals plus collections with  
21 interest?

22 A (Dr. Wright) I have no basis to comment on that  
23 for two reasons: No. 1. I don't know what the weather was  
24 or the weather normalization would have been absent the

1 customer utilization tracker; No. 2. When I prepared my  
2 testimony, I looked at the documentation I had regarding  
3 the history of performance and incentive ratemaking and  
4 looking at the history of decoupling mechanisms. I  
5 reviewed the Piedmont Order for this Commission issued. I  
6 reviewed the legislation. And then I had discussions with  
7 the Company and about how their decoupling mechanisms  
8 would have worked. So I didn't review the monthly reports  
9 and stuff of this nature. I just -- That was not  
10 something critical to my analysis.

11 Q And to clarify when you mentioned the legislation,  
12 are you referring to the legislation that passed, the new  
13 legislation that gives the Commission the authority to  
14 adopt a mechanism such as the CUT?

15 A (Dr. Wright) Yes. The copy I have is House Bill  
16 1086, G.S. 62-133.7 is what I'm looking at.

17 Q Okay. If we look at the exhibit that is marked  
18 Attorney General Exhibit No. 4, I submit to you that this  
19 is compilation of reports that Piedmont has filed that  
20 were referenced earlier showing, first, how -- beginning  
21 if you look at it with April 6, that's the time period  
22 when the charges began to be collected from customers  
23 after the CUT increment went into effect. So those  
24 numbers appearing in Columns 1, 2 and 3 reflect what was

1 recorded on monthly CUT reports on Page 1 of those  
2 reports. If you look at Exhibit 5 that was -- I think I  
3 asked already to have that marked for identification -- I  
4 am going to represent to you that this was a filing that  
5 was made by Piedmont. If you look in the first paragraph  
6 of that letter, the sentence indicates that it was for the  
7 Customer Utilization Deferred Account Adjustment by rate  
8 schedule for May 2008. If you turn over to what is called  
9 Page 1 in that, it's the page following that letter and  
10 you look at the line that's called increment/decrements.  
11 There is an amount that appears under residential in  
12 parenthesis, 1,357,461. Do you see that?

13 A (Dr. Wright) I see that number, yes.

14 Q If you will look back on Attorney General Exhibit  
15 No. 4 and look all the way down Column 1 for May '08, that  
16 same dollar amount appears?

17 A (Dr. Wright) That dollar amount does appear.

18 Q I will submit I have all of the monthly reports  
19 that were filed if you want to go through and match them  
20 up. But I ask you to take these numbers subject to check  
21 and --

22 MS. GRIGG: Commissioner Joyner, I just renew my  
23 objection. These are exhibits that were Company filings,  
24 at least AG CX 5, is a Company filing made in another

1 docket by another party. It's not a Commission's Order of  
2 which this Commission could take judicial notice. And  
3 none of the witnesses participated in that proceeding. So  
4 we just object to it being used for cross-examination.

5 COMMISSIONER JOYNER: For the time being that  
6 objection is overruled. The witnesses, to the extent that  
7 they are unable to respond, should indicate that in  
8 response to Ms. Force's question. And the record will  
9 reflect that. We will give whatever evidence is derived  
10 from that its appropriate weight.

11 Q Looking back at Cross-Examination Exhibit No. 4,  
12 Column 4 shows the total for the month reflecting the  
13 total of Columns 1, 2, and 3. And Column 5 shows for each  
14 month the computation of that month and the prior month.  
15 Do you follow me on that exhibit?

16 A (Dr. Wright) I follow you on the exhibit. I'm  
17 just curious why they are listed as negative numbers?

18 Q Oh. That's a good question. Dr. Wright, you are  
19 referring to the negative numbers on Page 1 of CX Exhibit  
20 5?

21 A (Dr. Wright) Yes.

22 Q There is a note there that if you look at that  
23 exhibit that refers to Page 3. Look back to Page 3 of the  
24 report. If you look at the caption on that it says,

1 computation of refunds and collections through CUT  
2 temporary. Do you see where collections has parenthesis  
3 around it?

4 A (Dr. Wright) Yes.

5 Q Does that answer your question?

6 A (Dr. Wright) Well, it answers my question. But  
7 here is my concern: We can go ahead through this line of  
8 questioning. You want me to accept Exhibit 4, which is a  
9 compilation of, I assume, monthly ones of these for the  
10 last three years, and accept it subject to check. As I  
11 understand it, if I accept it subject to check I've got to  
12 go back and check every one of these numbers. I will  
13 accept it as being a representation to the best of your  
14 ability. But unless my client tells me to go back and  
15 check these 30 or so reports and check every one of these  
16 numbers, I really don't want to necessarily do that.

17 Q I understand. I understand your point, Dr.  
18 Wright. But you would agree, wouldn't you, that to the  
19 extent that there are amounts deferred or collected during  
20 the experiment that that information reflects on what  
21 might occur under a CUT-type mechanism?

22 A (Dr. Wright) I will agree the numbers appear to be  
23 transferred properly from this month of May from this  
24 report.

1 Q I have other reports. Would you like to check the  
2 --

3 A (Dr. Wright) I don't. Maybe Ms. Paton --

4 A (Ms. Paton) I was going to say I would probably  
5 offer that I'm somewhat more familiar with the format of  
6 the reports than Dr. Wright is. If -- to clarify what's  
7 on this report, again, I think that my attorney made a  
8 good point that this is Piedmont's report and just quickly  
9 looking at it on Page 2 of what I believe is Exhibit 5  
10 here, the May report, looking at their deferral for  
11 residential customers you might have to, subject to check  
12 my math, but they have close to 600,000 residentia  
13 customers whereas we have closer to 400,000.

14 And my guess is that if we looked at the small  
15 general service and we don't have a medium general service  
16 class that Piedmont is a larger company and I would not at  
17 all be surprised to see that just their straight dollar  
18 value of a deferred amount would be larger than what we  
19 would expect to see. I don't -- I guess that's about all  
20 I would want to comment on is this is Piedmont's report.  
21 Our's will be similar as to format. But it is a different  
22 set of circumstance. This is three years ago. They have  
23 different degree days that were approved in their prior  
24 rate case, different "R" values. I don't know for a fact

1     what their basic facilities charge was that was set in  
2     their rate. I think it may have been a \$10 residential.  
3     If it was or wasn't, that is going to impact the margin  
4     rate that would have be used in their calculation, their  
5     "R" factor.

6             Again, it is Piedmont's report. The format is  
7     going to be similar to what we have, but our reports will  
8     reflect our customers, our consumption and what the  
9     Commission ultimately decides is appropriate for our  
10    customers in this proceeding.

11   Q       Is it fair to say, too, that the amount that's  
12   reflected in Piedmont's case was affected by the factors  
13   used in that case and the volumes that were set in that  
14   case?

15            MS. GRIGG: Objection. She is asking her to  
16   testify about Piedmont's case. And, again, she was not a  
17   witness in that case. And I don't think --

18            COMMISSIONER JOYNER: I'm going to overrule your  
19   objection. The question was: Is it fair to say? And the  
20   witness is competent to respond to whether she thinks  
21   that's fair.

22   A       (Ms. Paton) Yes, I would agree that it is based on  
23   what the Commission determined three years ago in  
24   Piedmont's proceeding was the appropriate normalized

1 consumption level for Piedmont given their service  
2 territory, given the weather patterns used at that point  
3 in time to determine normal weather. They have a  
4 different service territory than we do. I believe their  
5 customers probably have different consumption patterns  
6 than ours.

7           And, again, I don't know -- A layperson might  
8 walk in and see the dollars here and say that's a lot of  
9 money. And I certainly would say it's not a small amount.  
10 But what the dollar amount is in comparison to what their  
11 total approved cost to service was in their last  
12 proceeding, I don't know. Again, it's just a report of  
13 Piedmont's results based on their test period, consumption  
14 and everything else approved by the Commission in their  
15 last rate case, which I think we all remember Katrina and  
16 Rita that happened subsequent to that. And that impacted  
17 gas prices, everyone's consumption. I don't know and I  
18 have not looked, quite frankly, closely at what Piedmont  
19 has proposed in their current proceeding. It would not  
20 surprise me at all to see different factors that would in  
21 their going-forward CUT calculation. But, again, that  
22 would be information that's in their current docket, G-9,  
23 Sub 550.

24 Q           Still, is it fair to say that \$30 million a year



1 is the amount that would normally be an amount the  
2 Commission would look at in a general rate case proceeding  
3 as opposed to an adjustment mechanism proceeding?

4 A (Ms. Paton) Well, as Dr. Wright pointed out, this  
5 is -- the 30 million, and I don't remember which balance  
6 that was, but the Company, Piedmont and ourselves would  
7 have recorded some of the amount in a year for WNA. In  
8 the 30 million you are referring to, whether that number  
9 would have been five or twenty-five, I don't know. So you  
10 can't -- the 30 is not a brand new item.

11 Q So I think -- Is it safe to say that your point is  
12 that some amount could be collected, some part of that  
13 amount could be collected in a different mechanism?

14 A (Ms. Paton) Some of it would have been prior to  
15 implementation of the CUT. And to your point about  
16 whether or not it's looked at outside a rate case, we need  
17 to remember that all of these calculations are based on  
18 the decisions made in a rate case; that this was the  
19 approved normalized consumption level; the margin per  
20 customer. These are tied right back to the volumes  
21 approved in the rate cases. It's nothing more, nothing  
22 less.

23 Q And if you look at the amount at the end of each  
24 year, and I submit to you that the CUT began in November.

1 So the end of the first year, you'd be looking at the  
2 month October '06; and if you look again October '07. So  
3 at the end of the second year you have about 30 million at  
4 the end of the first year, about 60 million the second  
5 year, and a little over 90 million in the third year.

6 Does that --

7 A (Ms. Paton) That's cumulative, yes. And, again, I  
8 don't think you can look at 30 million just in isolation  
9 and say anything other than that is what the math produced  
10 given what the Commission approved in Piedmont's last rate  
11 case.

12 Q But it doesn't reflect 30 million one year, 45  
13 million the next and 5 in the next year. It was about the  
14 same amount each year; right?

15 A (Ms. Paton) That would appear to be the case, yes.

16 Q Looking at the development of a CUT mechanism, did  
17 you look at the impact on earnings during that same  
18 period, Piedmont's earnings? We talked about the  
19 potential impact on Public Service.

20 A (Ms. Paton) I did not look at any of Piedmont's  
21 earnings. I do look at the report the Commission issues,  
22 but I don't do it regularly. I more often look at what  
23 they report on us than the other Companies. Again, this  
24 is one factor in their overall earnings. This is one

1 piece of what goes into calculating earnings.

2 Q So by that you mean the earnings -- if they did  
3 well on their earnings or if they didn't do as well, for  
4 instance, how you did, it's not just tied to that  
5 mechanism, there are other factors that would effect it,  
6 too?

7 A (Ms. Paton) Absolutely. It's what your rate base  
8 is, it's how you're controlling your expenses. Again,  
9 this is one piece. This is trying to stabilize the margin  
10 revenues that get approved in a rate case.

11 Q You mentioned, I think, the Commission's report.  
12 Were you referring to the Quarterly Review?

13 A (Ms. Paton) Yes.

14 MS. FORCE: Madam Chair, I'd ask -- I don't  
15 think this is premarked. I'd ask that the next exhibit be  
16 marked as Attorney General Cross Exhibit No. 6.

17 COMMISSIONER JOYNER: That will be identified.

18 (Whereupon, Attorney General CX Exhibit No.  
19 6 was marked for identification.)

20 Q I represent to you that these are pages from the  
21 Commission's Quarterly Reviews, excerpts that include the  
22 most recent quarterly report that refers to the quarter  
23 ending September 30, 2007, that, to the quarterly report  
24 ending December 31 '05, right after the experiment began.

1           And what is included is not the entire review of  
2 how the reviews here, it's Pages 8. It doesn't always  
3 stay the same, but the summary statement and statements  
4 particular Piedmont. I am going to focus on the summary  
5 statement.

6           If we look at the first page that relates to the  
7 period ending September 30, 2007, Piedmont's overall rate  
8 of return is identified as 9.11 percent; is that right?

9           A           (Ms. Paton) That's what the report shows, yes.

10          Q           According to the report, the Commission's report.  
11 And under the authorized overall rate of return, it shows  
12 9.04 percent; is that right?

13          A           (Ms. Paton) That's correct.

14          Q           So during that period ending September 30, 2007,  
15 according to the report, Piedmont was exceeding its  
16 authorized rate of return; is that right?

17          A           (Ms. Paton) That would be what report shows, yes.

18          Q           And I submit to you that during -- in all of these  
19 reports, out of the seven reports, five of those reports  
20 were either achieving their overall -- in two cases they  
21 were right at their overall rate of return or exceeding  
22 it?

23          A           (Ms. Paton) Subject to check, I will accept that.  
24 And I would just have to repeat that the margin

1 adjustments from the CUT are just one component of what  
2 goes into determining any Company's rate of return. It's  
3 their rate base. It's their expenses. That is one  
4 factor. And I don't think it would be appropriate to try  
5 to say that the overall return or the return on equity is  
6 directly related to what has happened with their CUT  
7 adjustments.

8 Q If you look at the amount that's -- the return on  
9 equity that's listed in those reports, it's 11.81 and  
10 that's quite a bit higher than the other Companies in  
11 North Carolina for electric and gas; isn't that so?

12 A (Ms. Paton) I would say Duke looks like it's doing  
13 a little better.

14 Q Okay?

15 A (Ms. Paton) I just have to point out that PSNC is  
16 not earning its overall return. I feel compelled to point  
17 that out to everyone here.

18 Q And if they were, it wouldn't be just because of  
19 the CUT mechanism. It would be other factors as well?

20 A (Ms. Paton) That is true.

21 Q Now, during these periods of time -- I submit to  
22 you and I think you've seen -- Well, let's wait for the  
23 next exhibit.

24 MS. FORCE: I'd ask that the exhibit that has

1 been handed out be identified as Attorney General  
2 Cross-Examination Exhibit No. 7.

3 COMMISSIONER JOYNER: It will be identified.

4 (Whereupon, Attorney General CX Exhibit No.  
5 7 was marked for identification.)

6 DR. WRIGHT: May I say something here? I had to  
7 put on my glasses. Unfortunately I can't read this thing  
8 about this last exhibit.

9 COMMISSIONER JOYNER: Dr. Wright, I don't think  
10 there is a question on the table yet. And as soon as  
11 there is one directed at you, that would be a better time  
12 for you to clarify whatever it is you --

13 DR. WRIGHT: I was trying to add to what Ms.  
14 Paton said on her last answer. I apologize. It took some  
15 time to read through this exhibit that Ms. Paton was  
16 handed.

17 Q Dr. Wright, I assure you I didn't set the font on  
18 the exhibit that was handed out as No. 6. I have a hard  
19 time with it, too.

20 I passed what I will submit to you are all of  
21 Orders that the Commission issued approving rate  
22 increments associated with the CUT for Piedmont. And I  
23 ask that you take a look at the second page of the first  
24 Order. In that Order, I submit to you, is April 1, 2006,

1 is the first Order approving a CUT increment for Piedmont  
2 after the CUT was implemented. And it shows temporaries  
3 associated with that time period. Now, I am going to  
4 submit to you and you can check based on these Orders each  
5 time there was an adjustment there was an increase to  
6 rates. And by that I want to clarify it didn't -- the  
7 amount of the adjustment didn't go up each time, but there  
8 was a temporary put into rates. And each time it  
9 reflected an increase to rates. And you can check on  
10 that. Did you understand my statement and could you --

11 A (Ms. Paton) I did, yes.

12 Q -- agree or disagree with that based on these  
13 Orders each time there was an increment that applied?

14 A (Ms. Paton) I understood. And subject to check,  
15 yes.

16 Q Okay. And so at some point these Orders were  
17 issued when you look at this exhibit compared to the one  
18 that you just looked at, there were points in time when  
19 Orders were issued authorizing an increment to rates at a  
20 time when Piedmont was, according to Commission reports,  
21 exceeding its authorize rate or return. Can you disagree  
22 with that statement or would you like to agree with it?

23 A (Ms. Paton) That would appear to be the case, yes.

24 MR. ADDISON: Madam Chair, can I offer a

1 comment?

2 COMMISSIONER JOYNER: When we are presenting  
3 with a panel, typically either member of the panel within  
4 reason can respond to questions unless it has been  
5 specifically restricted. And I don't believe that  
6 question had been. So the answer is, yes, you may.

7 MR. ADDISON: Thank you.

8 A (Mr. Addison) Back to your Exhibit 6, I believe,  
9 the reports from the Commission and certainly the  
10 Commission and Staff would be more familiar than me. But  
11 I believe these are just the per-book return numbers and  
12 have not been performed for all of the agreed upon  
13 adjustments et cetera that might happen in a full rate  
14 proceeding. So it might be a reach to presume, just  
15 taking these numbers on the surface, that they are  
16 exceeding their allowed return. I would expect these are  
17 more of a gauge or surveillance report to give the  
18 Commission a general indication of direction and not an  
19 absolute scientific calculation of where they are.

20 Q And just for clarification, I think it's my  
21 understanding from read the report that these are base on  
22 annual report filed with the Commission by the Companies?

23 A (Mr. Addison) Right. Let me speak for PSNC. If  
24 we were to file a rate case in any one of these points



1 that you handed out, we would make additional adjustments  
2 that are more precise for that point in time. That's my  
3 only point.

4 Q And to follow up on that point then, I think it  
5 would be your position that if you were to look at all the  
6 costs and factors at the time, it might show that there  
7 wasn't an over earning going on?

8 A (Mr. Addison) It might show there was not.

9 Q But it is true, isn't it, that according to the  
10 reports before the Commission that monitor and form of  
11 surveillance of how the Company is doing, it was exceeding  
12 the authorized rate of return at the time that these CUT  
13 increments were authorized?

14 A (Ms. Addison) Based on the surface calculations.

15 DR. WRIGHT: I think that was actually wrong,  
16 Madam Chair, on that particular question. If I can show  
17 you something on the documents that she passed out. If  
18 you want the right answer, I've got the right answer.

19 COMMISSIONER JOYNER: Dr. Wright, you've got the  
20 right answer to what?

21 DR. WRIGHT: To her question just then about  
22 whether the Company was over earning.

23 COMMISSIONER JOYNER: Okay. Then you may  
24 respond to Ms. Force's question.

1 A (Dr. Wright) Yes. To that specific question I do

2 --

3 COMMISSIONER JOYNER: And after that response,  
4 Ms. Force, if you have any follow up, we are going to get  
5 into that after lunch.

6 MS. FORCE: Okay.

7 A -- the problem is we were just handed these  
8 documents and they are multiple pages. When I look at the  
9 documents, the very first Order in the one she just passed  
10 out -- I don't know which exhibit she called it -- Exhibit  
11 7, it is dated March 2006. If I turn back on her Exhibit  
12 6 to 3-31-06, as I read it the authorized return was 9.04  
13 percent overall. The overall return at that time, March  
14 of 2006, was 8.89. The Company without any adjustments on  
15 these filed returns was, I think, from what I see, are  
16 earning less, now unless somebody can show me that I've  
17 got the dates wrong. So then I look at November. The  
18 next adjustment that she passed out is this Exhibit 7 --

19 Q I'm sorry.

20 A (Dr. Wright) Unless I am looking at something  
21 wrong.

22 COMMISSIONER JOYNER: Are you still responding  
23 to Ms. Force's last question?

24 A (Dr. Wright) Yes, ma'am. She said the Company was

1 over earning. And I'm looking at numbers that say they  
2 were slightly under earning.

3 Q Dr. Wright, I'm sorry. Could you go back to the  
4 last one that you said because I didn't follow you.

5 A (Dr. Wright) Yes. If you go to Exhibit 6.

6 Q Have you turned back to the last report, the one

7 --

8 A (Dr. Wright) The last report, Exhibit 6, which you  
9 say indicates the Company was over earning. As I read it,  
10 Piedmont's authorized overall level or return was 9.04  
11 percent. Their achieved overall return at that time was  
12 8.89 percent. Now unless I'm wrong, 8.89 is less than  
13 9.04; now that was in November of 2006.

14 If I look at what you just passed out as Exhibit  
15 7 and the Order of April 1, 2006, which was effective the  
16 28th of March 2006, it indicates or you indicated that the  
17 Company got an increase in their rates based on their  
18 customer utilization tracker. At that time based on your  
19 exhibit, the way I read it, the Company was not earning  
20 its allowed return. Now I am not testifying for Piedmont.  
21 I'm just testifying on what the exhibit shows.

22 Now, if I go back to your Exhibit 7, which is  
23 the one she just gave out, there's a November 2006  
24 adjustment. I go back to your Exhibit 6 where you say the

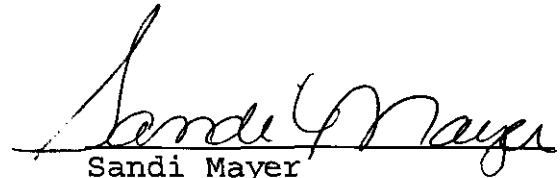
1 Company was over earning and on the date of 9-30-06, which  
2 is about October 1, which is in the same ballpark of when  
3 this Order became effective, the overall allowed return  
4 was 9.04. The Company's achieved return was 9.02. So  
5 your characterization that the Company was over earning  
6 when these Orders were issues, I think is an improper  
7 characterization. I think they may have been over earning  
8 in some time periods and may have not based on your own  
9 exhibit.

10 COMMISSIONER JOYNER: And we are about to go  
11 into recess now. I am sure there will be some follow-up.  
12 Let me just say for the record that I have allowed inquiry  
13 into the Piedmont CUT principally on the basis that the  
14 witnesses, at least Ms. Paton anyway, admitted she did not  
15 re-invent the wheel, that she looked at Piedmont and the  
16 experience under that is the presiding Commissioner's view  
17 relevant. But I do not want us to spend a considerable  
18 portion of the afternoon analyzing Piedmont's CUT because  
19 we are going to doing that in a month or so. So I would  
20 like for us to finish this line of questioning as  
21 expeditiously as we can and to get back to the issues with  
22 respect to the CUT proposed by PSNC.

23 With that, we are in recess until 1:30.  
24

CERTIFICATE

The undersigned Court Reporter certifies that  
this is the transcription of notes taken by her during  
this proceeding and that the same is true, accurate and  
correct.

A handwritten signature in cursive script, appearing to read "Sandi Mayer", is written over a horizontal line.

Sandi Mayer  
Court Reporter II