

PUBLIC STAFF – NORTH CAROLINA UTILITIES COMMISSION  
DIRECT TESTIMONY OF  
JAN A. LARSEN  
BEFORE THE NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. G-5, SUB 565  
AUGUST 18, 2016

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

3 A. My name is Jan A. Larsen and my business address is 430 North  
4 Salisbury Street, Raleigh, North Carolina. I am the Director of the  
5 Public Staff's Natural Gas Division. My qualifications and experience  
6 are provided in Appendix A.

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

9 A. The purpose of my testimony is to present the Public Staff's  
10 recommendations regarding several aspects of the application by  
11 Public Service Company of North Carolina, Inc. (PSNC or Company)  
12 for a General Rate Increase. The recommendations pertain to: (1)  
13 the appropriate calculation of Company Use and Lost and  
14 Unaccounted For Gas (CU & LUAF), (2) the appropriate End of  
15 Period adjustments for weather normalization and customer growth,  
16 (3) a reasonable and appropriate rate design, and (4) the Company's  
17 tariffs.

1           COMPANY USE AND LOST AND UNACCOUNTED FOR GAS

2    Q.    PLEASE EXPLAIN YOUR ADJUSTMENT TO COMPANY USE AND  
3            LOST AND UNACCOUNTED FOR GAS.

4    A.    The Company calculated \$1,754,426 of CU&LUAF gas costs by  
5            multiplying its proposed sales and transportation volumes by the  
6            prior rate case Commission-approved CU&LUAF collection rate of  
7            \$.00202 per therm. PSNC did not update its CU&LUAF rates in the  
8            current rate case.

9            The Public Staff accepted the Company's company use volume level  
10           and then computed a ratio of PSNC's proposed LUAF volumes  
11           relative to its sales and transportation therms which was based on  
12           PSNC's evaluation of recent operating experience. Using the  
13           updated CU&LUAF volume level, the Public Staff applied a  
14           CU&LUAF ratio of 0.977% to its recommended sales and  
15           transportation volumes to determine the recommended CU&LUAF  
16           volumes and then multiplied that CU&LUAF volume level by the  
17           \$0.225 per benchmark to determine the dollar amount of gas costs  
18           associated with CU&LUAF gas of \$1,777,080. It is our  
19           understanding that PSNC agrees with our methodology for  
20           determining the CU&LUAF ratio but not the sales and transportation  
21           volumes recommended by the Public Staff that we applied the  
22           CU&LUAF ratio to.

23

1           END-OF-PERIOD VOLUMES AND CUSTOMER DETERMINATION

2    Q.    WHAT ARE THE TOTAL SALES AND TRANSPORTATION  
3           VOLUMES AND CUSTOMER NUMBERS THAT YOU HAVE USED  
4           IN CALCULATING THE END-OF-PERIOD RATES?

5    A.    I have evaluated PSNC's test year volumes and customer levels and  
6           the Public Staff's adjustment for the addition of a new rate class –  
7           Rate Schedule 140 – Medium General Service, weather  
8           normalization and customer growth. I will discuss each adjustment  
9           below.

10                           NEW RATE SCHEDULE

11           PSNC is proposing a new Rate Schedule 140 – Medium General  
12           Service that is designed for commercial customers who use more  
13           than 25,000 but less than 60,000 (the threshold for Rate Schedules  
14           145 and 175) therms per year. As PSNC has stated, there are 887  
15           customers of the nearly 43,000 current Rate Schedule 125 – Small  
16           General Service customers who would qualify for this new rate  
17           schedule. I agree with the Company's reasoning for creating this  
18           new Rate 140, and recommend this be approved.

19                           WEATHER NORMALIZATION – HEATING DEGREE DAYS

20           When evaluating a general rate case, the Public Staff runs its own  
21           weather normalization model and compares the results to those  
22           produced by the PSNC model. Typically in the past, the results of  
23           the models used by the Public Staff and PSNC (as well as other

1 Local Distribution Companies (LDCs)) have been very close, and we  
2 have accepted the results of the LDCs' models for determining the  
3 appropriate weather normalization adjustment. However, in this  
4 current docket, our results are significantly different.

5 Q. WHAT DID THE PUBLIC STAFF'S WEATHER NORMALIZATION  
6 ADJUSTMENT SHOW?

7 A. The Public Staff's weather normalization shows an increase in heat  
8 sensitive volume of approximately 9.3 million therms. That  
9 calculation is shown on Larsen Exhibit A. Increasing volumes due to  
10 warmer than normal weather makes logical sense because heat  
11 sensitive customers did not use as much gas as they would have had  
12 weather been normal.

13 Q. PLEASE EXPLAIN HOW YOU CALCULATED THIS WEATHER  
14 NORMALIZATION ADJUSTMENT.

15 A. The Public Staff's method of calculating the weather normalization is  
16 to take the test year customer data (number of bills and consumption  
17 by month) and compare that with the monthly Actual Heating Degree  
18 Days (HDDs) and develop a mathematical model that computes a  
19 Base Load and Heat Sensitive Factor (HSF.) This Base Load and  
20 HSF components are then applied to the test year's Normal HDDs  
21 and the result is a volume level that would have been expected if the  
22 weather had been normal during the test year.

23 Q. PLEASE EXPLAIN HEATING DEGREE DAYS AND HOW THEY

1 ARE UTILIZED IN YOUR MATHMATICAL MODEL.

2 A. HDDs are calculated by taking the average daily temperature and  
3 subtracting that from a base or standard temperature of 65 degrees.  
4 For example, a low of 20 degrees and a high of 40 degrees would  
5 yield an average of 30 degrees and a HDD of 35 degrees ( $65 -$   
6  $(20+40)/2$ .) The Normal HDDs are based on a 15-year average (the  
7 years 2000 – 2015 in this docket.) PSNC used to use a 30-year  
8 Normal HDDs but moved to a 15-year normalization in its last general  
9 rate case in Docket No. G-5, Sub 495.

10 A mathematical model in the form of a linear regression compares  
11 the average usage to the Actual HDD. The accuracy of this model  
12 can be determined by examining the  $R^2$  ("R Squared") that the model  
13 produces. The closer the R Squared is to 1.000, the more accurate  
14 the model. The Public Staff's models resulted in an R Squared value  
15 of .992 which indicates a very accurate regression.

16 I performed this regression by grouping all residential customers  
17 (Rates 101 and 102) and all small commercial customers (Rates 125  
18 and 127) and doing three regressions by region – Raleigh/Durham,  
19 Gastonia/Charlotte, and Asheville, which are PSNC's three customer  
20 base regions. This is the method we use when determining peak  
21 day demand in PSNC's Annual Review of Gas Costs each year.  
22 Updated customer usage patterns using the review or test period  
23 customer data and computing normalized usage is an important  
24 computation that allows LDCs to accurately project customer usage

1 during peak or the coldest days.

2 END OF PERIOD REVENUES

3 Q. HOW DOES THE DIFFERENCE IN VOLUME AFFECT  
4 REVENUES?

5 A. In order to get to an End of Period revenue level, the proper levels of  
6 customer bills are multiplied by the facilities charges and the proper  
7 levels of volumes are multiplied by the energy charges. Simply put,  
8 if the customer or volume level is lower, the End of Period revenues  
9 are less, and a greater increase in rates must occur in order to satisfy  
10 the revenue requirement. The Public Staff's End of Period Revenues  
11 with the Public Staff's recommended volume level from our weather  
12 normalization adjustment under existing rates is \$4,177,588 more  
13 than that calculated by the Company. There is a corresponding  
14 increase in commodity cost of gas expense associated with this  
15 revenue increase of \$2,606,522, for a net revenue increase of  
16 \$1,457,278. Larsen Exhibit B shows my calculations. This is the  
17 "starting point" for the rate case.

18 In addition, the Public Staff's recommended level of Other Operating  
19 Revenues is \$3,526,964, which represents an increase of \$113,788  
20 over PSNC's level of \$3,413,176. This increase is due to a customer  
21 growth adjustment that I have recommended to Public Staff witness  
22 Boswell, which she has made to various items in Other Operating  
23 Revenues.

1 Therefore, the total Public Staff recommended end-of-period  
2 revenues is \$434,445,667.

3 RATE DESIGN

4 Q. HOW DO YOU RECOMMEND THAT THE COMPANY RECOVER  
5 THE PUBLIC STAFF'S RECOMMENDED REVENUE  
6 REQUIREMENT?

7 A. The Staff is recommending an increase of \$18,711,557 for an overall  
8 annual revenue requirement of \$453,157,224. I recommend that  
9 many factors be considered in designing rates to allow the Company  
10 to recover the annual level of revenues. Among these are (1) value  
11 of service, (2) type of service, (3) quantity of use, (4) time of use, (5)  
12 manner of service, (6) competitive conditions relating to the  
13 acquisition of new customers, (7) historical rate design, (8) revenue  
14 stability of the Company, (9) economic policy, (10) administrative  
15 ease, and (11) allocated cost of service studies.

16 Value of service is an important consideration since it recognizes that  
17 the price paid for natural gas service cannot be significantly greater  
18 than a satisfactory alternative. The fact that natural gas is cleaner  
19 burning (producing less emissions) and easier to use also affects its  
20 value for some customers. Value of service consideration is the  
21 reason why rates for some rate classes are designed to allow for  
22 negotiations based on alternative fuel pricing and also transportation  
23 of gas procured by end-users.

1 The type of service, quantity of use, time of use, and manner of  
2 service are considered by reviewing customer characteristics.  
3 Different types of customers have different needs. For example, heat  
4 sensitive residential and commercial customers need more security  
5 of service during peak (cold) winter days than do non-heat sensitive  
6 customers, and they pay for this enhanced service by contributing  
7 more margin in the form of higher rates. Within the industrial class,  
8 some customers require a firm gas supply in their manufacturing  
9 process whereas others use gas only as boiler fuel. Some may  
10 choose to have an alternate fuel available, and some may not. Rate  
11 design should reflect all these differences among customers.

12 Rates should be attractive to new customers. Some industrial  
13 customers are energy intensive and are very conscious of their  
14 choice of fuels. Residential and small commercial customers are  
15 also concerned with their long-term commitment to their energy  
16 choice. Rates should be set in a manner to be appealing to all  
17 classes of customers so as to contribute both to the financial health  
18 of the utility and the welfare of its customers.

19 Historical rate design is also considered both in evaluating the results  
20 of past rate design and in anticipating the response to the  
21 recommended rate design.

22 In reviewing the revenue stability of the utility, I considered whether  
23 rates would enable the Company to attract new customers and keep

1 the customers it currently has. Dramatic changes in rate design can  
2 result in unpredictable revenue shifts and should generally be  
3 avoided.

4 Economic policy includes rate design that encourages economic  
5 growth in the Company's territory for all rate classes. Proper rate  
6 design can facilitate growth by enabling the Company to add new  
7 load in a cost-effective manner.

8 Administrative ease involves the reasonable classification of  
9 customers into various groups or classes where they share  
10 similarities. If customers are separated into too many rate  
11 categories, the utility incurs excessive administrative costs that  
12 provide little benefit to customers.

13 Finally, rates of return resulting from cost of service studies are  
14 considered in determining rate design and are used as a guide in  
15 determining the direction of rate changes for the various customer  
16 classes.

17 Q DO YOU AGREE WITH PSNC'S INCREASE IN FACILITIES  
18 CHARGES IT IS PROPOSING?

19 A. No, I do not. Since the Company is already recovering the margin  
20 that was determined in the rate case through the Customer Utilization  
21 Tracker (CUT), there is no need from a cost recovery standpoint for  
22 raising the facilities charges. Facilities charges are very unpopular

1 with customers, and the Company can recover its margin through the  
2 energy charges that are trued up by the CUT.

3 Q. HOW HAVE YOU TAKEN COST OF SERVICE INTO  
4 CONSIDERATION IN ARRIVING AT YOUR  
5 RECOMMENDATIONS?

6 A. The Public Staff has prepared a fully allocated cost of service study  
7 under PSNC's existing rates with pro forma adjustments (end-of-  
8 period). I have evaluated that study and have used it as a guide in  
9 this proceeding. The Public Staff has worked with PSNC and  
10 Carolina Utility Customers Association, Inc. (CUCA) and Blue Ridge  
11 Paper Products Inc. d/b/a Evergreen Packaging (Evergreen), the two  
12 intervenors representing industrial customers in this docket.  
13 Through a series of analysis and discussion, we have come to an  
14 agreement regarding rate design, and my recommended rate design  
15 takes into account this understanding. My recommended rates are  
16 shown in Larsen Exhibit C.

17 Q. WHAT IS THE EFFECT ON CUSTOMERS' BILLS FROM THE  
18 EXISTING BILLING RATES TO YOUR RECOMMENDED RATES?

19 A. Residential customers will experience an average bill increase of  
20 \$2.11 per month or 4.3%. Other rate classes will see similar or  
21 slightly lower rate increases.

22 Q. WHAT IS YOUR RECOMMENDATION CONCERNING THE

1 PROPOSED INCREASES IN RECONNECT FEES?

2 A I recommend that these proposed fees be approved. In response to  
3 data requests, PSNC stated that normal increases in operating  
4 expenses led it to request this increase in reconnection fees.  
5 Allowing these fees to recover the actual costs in disconnecting and  
6 then reconnecting customers keeps other customers from  
7 subsidizing those who are going through the disconnect/reconnect  
8 process. These fees and charges reduce the revenue requirement  
9 increase that must be recovered through customers' rates.

10 Q. DOES THIS COMPLETE YOUR TESTIMONY?

11 A. Yes.

QUALIFICATIONS AND EXPERIENCE  
OF  
JAN A. LARSEN  
DIVISION DIRECTOR

PUBLIC STAFF - NATURAL GAS DIVISION  
NORTH CAROLINA UTILITIES COMMISSION

I graduated from North Carolina State University in 1983 with a Bachelor of Science degree in Civil Engineering. I was employed with Law Engineering Testing Company as a Materials Engineer from 1983 to 1984. From 1984 until 1986, I was employed by the North Carolina Department of Transportation as a Highway Engineer. In 1986, I was employed by the Public Staff's Water Division as a Utilities Engineer I. In 1992, I was promoted to Utilities Engineer II with the Public Staff's Natural Gas Division and promoted to Utilities Engineer III in 2002. In May of 2016, I was promoted to the Director of the Public Staff's Natural Gas Division.

My most current work experience with the Public Staff includes the following topics:

1. Rate Design
2. Cost-of-Service Studies
3. Purchase Gas Cost Adjustment Procedures
4. Tariff Filings
5. Natural Gas Expansion Project Filings
6. Depreciation Rate Studies
7. Annual Review of Gas Costs
8. Weather Normalization Adjustments
9. Customer Utilization Trackers
10. Feasibility Studies / Line Extension Policies
11. Pipeline Integrity Management Riders

## PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 565  
SUMMARY OF VOLUME AND BILL ADJUSTMENT  
FOR END OF PERIOD

RATE SCHEDULE NUMBER (1)	PER BOOKS		ANNUALIZATION AND RATE SHIFTING		WEATHER NORMALIZATION VOLUMES (THERMS) (6)	GROWTH ADJUSTED BILLS AND USAGE LEVELS			
	BILLS (2)	VOLUMES (THERMS) (3)	BILLS (4)	VOLUMES (THERMS) (5)		(SEASONAL)		(ANNUAL)	
						BILLS (7)	VOLUMES (THERMS) (8)	BILLS (9)	VOLUMES (THERMS) (10)
101 Winter	2,859,086	246,857,091	2,859,086	246,857,091	252,393,363	2,933,136	258,930,351	5,835,861	298,249,530
101 Summer	2,829,442	37,829,541	2,829,442	37,829,541	38,326,522	2,902,725	39,319,179		
102 Winter	42,679	3,174,556	42,679	3,174,556	3,248,137	48,872	3,719,441	98,484	4,394,381
102 Summer	43,326	582,810	43,326	582,810	589,415	49,613	674,939		
115 Winter	258	32,799	258	32,799	32,799	258	32,799	515	65,697
115 Summer	257	32,898	257	32,898	32,898	257	32,898		
125/225 Winter	258,634	111,059,584	253,278	86,782,275	88,946,859	257,409	90,397,640	500,851	120,753,701
125/225 Summer	255,296	37,658,761	250,008	29,674,570	29,868,881	254,086	30,356,061		
126 Winter	26	30,986	26	30,986	30,986	26	30,986	50	61,972
126 Summer	24	30,986	24	30,986	30,986	24	30,986		
127/227 Winter	551	812,286	551	812,286	830,021	572	861,254	1,145	1,000,973
127/227 Summer	552	133,060	552	133,060	134,652	573	139,719		
135 Winter	28	143,978	28	143,978	143,978	28	143,978	114	250,145
135 Summer	86	106,167	86	106,167	106,167	86	106,167		
140 Winter			5,356	24,277,309	24,917,214	5,356	24,917,214	10,644	32,958,849
140 Summer			5,288	7,984,191	8,041,634	5,288	8,041,634		
145 Winter	1,240	19,273,854	1,240	19,273,854	19,273,854	1,240	19,273,854	2,488	27,482,092
145 Summer	1,248	8,208,238	1,248	8,208,238	8,208,238	1,248	8,208,238		
150 Winter	45	3,666,387	45	3,666,387	3,666,387	45	3,666,387	93	6,704,243
150 Summer	48	3,037,856	48	3,037,856	3,037,856	48	3,037,856		
175 Winter	1,879	97,125,452	1,879	97,125,452	97,125,452	1,879	97,125,452	3,763	174,902,640
175 Summer	1,884	77,777,188	1,884	77,777,188	77,777,188	1,884	77,777,188		
180 Winter	805	72,589,490	805	72,589,490	72,589,490	805	72,589,490	1,598	141,762,340
180 Summer	793	69,172,850	793	69,172,850	69,172,850	793	69,172,850		
200 Winter	6	298,675	6	298,675	298,675	6	298,675	12	12,778,728
200 Summer	6	12,480,053	6	12,480,053	12,480,053	6	12,480,053		
201 Winter	6	3,660,285	6	3,660,285	3,660,285	6	3,660,285	12	10,278,984
201 Summer	6	6,618,699	6	6,618,699	6,618,699	6	6,618,699		
202 Winter	6	18,003,028	6	18,003,028	18,003,028	6	18,003,028	12	105,438,138
202 Summer	6	87,435,110	6	87,435,110	87,435,110	6	87,435,110		
<b>TOTAL</b>	<b>6,298,223</b>	<b>917,832,668</b>	<b>6,298,223</b>	<b>917,832,668</b>	<b>927,021,677</b>	<b>6,466,286</b>	<b>937,082,412</b>	<b>6,455,642</b>	<b>937,082,412</b>

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

Larsen Exhibit B  
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DOCKET NO. G-5, SUB 565

END OF PERIOD OPERATING REVENUES UNDER PRESENT RATES

Rate Schedule (1)	Description (2)	Season (3)	No. Bills (4)	Monthly Facilities Charge (5)	Therms (6)	End-Of-Period Rates (\$/therm) (7)	Facilities Charge Revenue (8)	Energy Charge Revenues (9)	CUT Adjustment (10)	Total Revenues (11)	
101	RESIDENTIAL	Winter *	2,933,136	\$10.00	258,930,351	\$0 73744	\$29,331,363	\$190,945,598	\$5,609,331	\$225,886,292	
		Summer **	2,902,725	10.00	<u>39,319,179</u>	0.66981	<u>29,027,245</u>	<u>26,336,379</u>	<u>2,737,624</u>	<u>58,101,249</u>	
		Total Rate Schedule No. 101				298,249,530		\$58,358,609	\$217,281,977	\$8,346,955	\$283,987,541
102	RESIDENTIAL HIGH EFFICIENCY	Winter *	48,872	\$10.00	3,719,441	0 68744	\$488,717	\$2,556,893	\$115,963	\$3,161,573	
		Summer **	49,613	\$10.00	<u>674,939</u>	0 61981	<u>496,126</u>	<u>418,334</u>	<u>13,273</u>	<u>927,733</u>	
		Total Rate Schedule No. 102				4,394,381		\$984,843	\$2,975,227	\$129,236	\$4,089,306
115	GAS LIGHTS	Winter *	258	\$10.00	32,799	0 73744	\$2,580	\$24,187		\$26,767	
		Summer **	257	\$10.00	<u>32,898</u>	0.66981	<u>\$2,570</u>	<u>22,035</u>		<u>24,605</u>	
						65,697		\$5,150	\$46,223		\$51,373
125	SMALL GEN. SERVICE	Annual	511,495	\$17.50			\$8,951,161			\$8,951,161	
					First 500 Th	79,564,446	0 62988		\$50,116,053	(\$348,733)	49,767,320
					Next 4,500 Th	69,288,954	0 56952		39,461,445	(303,695)	39,157,750
					Over 5,000 Th	<u>4,859,149</u>	0 52559		<u>2,553,920</u>	<u>(21,298)</u>	<u>2,532,622</u>
		Total Rate Schedule No. 125				153,712,550		\$8,951,161	\$92,131,419	(\$673,726)	\$100,408,854
126	SMALL GEN. SERVICE - COOLING	Annual	50	30.00	61,972	0 52559	\$1,500	\$32,572		\$34,072	
127	SMALL GEN. SERVICE HIGH EFFICIENCY	Annual	1,145	\$17.50			\$20,029			\$20,029	
					First 500 Th	350,165	0 57988		\$203,054	(\$47,552)	155,502
					Next 4,500 Th	602,437	0 51952		3,12,978	(81,810)	231,168
					Over 5,000 Th	<u>48,371</u>	0 47559		<u>23,005</u>	<u>(6,569)</u>	<u>16,436</u>
Total Rate Schedule No. 127				1,000,973		\$20,029	\$539,037	(\$135,931)	\$423,134		
135	NATURAL GAS VEHICLE FUEL	Annual	114		250,145	0 70130	\$0	\$175,427		\$175,427	
145	LARGE GEN. SERVICE	Annual	2,488	\$300.00			\$746,400			\$746,400	
					First 15,000 Th	19,565,501	0 41914		\$8,200,684		8,200,684
					Next 15,000 Th	4,140,327	0 39732		1,645,035		1,645,035
					Next 15,000 Th	1,739,803	0 37782		657,332		657,332
					Next 15,000 Th	883,094	0 35236		311,167		311,167
					Over 60,000 Th	<u>1,153,367</u>	0 33117		<u>381,961</u>		<u>381,961</u>
Total Rate Schedule No. 145				27,482,092		\$746,400	\$11,196,179		\$11,942,579		
SUBTOTAL - PAGE 1			6,450,152		485,217,339		69,067,692	324,378,060	7,666,533	\$393,445,751	

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Aug 18 2016

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

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DOCKET NO. G-5, SUB 565

END OF PERIOD OPERATING REVENUES UNDER PRESENT RATES

Rate Schedule (1)	Description (2)	Season (3)	No. Bills (4)	Monthly Facilities Charge (5)	Therms (6)	End-Of-Period Rates (\$/therm) (7)	Facilities Charge Revenue (8)	Energy Charge Revenues (9)	CUT Adjustment (10)	Total Revenues (11)	
150	LARGE INTERRUPTIBLE COMMERCIAL & INDUSTRIAL (NOTE: Priced out at 180's Rates)	Annual	93	\$600.00				\$55,800			\$55,800
			First	15,000	Th	1,181,779	0.35261		\$416,707		416,707
			Next	15,000	Th	808,254	0.33171		268,106		268,106
			Next	70,000	Th	1,940,459	0.30185		585,728		585,728
			Next	500,000	Th	2,773,751	0.29027		805,137		805,137
			Over	600,000	Th	0	0.26941		0		0
Total Rate Schedule No. 150					6,704,243		\$55,800	\$2,075,677		\$2,131,477	
175	LARGE GEN. SERVICE TRANSPORTATION (RS 145 CUSTOMERS)	Annual	3,763	\$300.00			\$1,128,900			\$1,128,900	
			First	15,000	Th	44,858,555	0.14542		\$6,523,331		6,523,331
			Next	15,000	Th	23,405,022	0.12360		2,892,861		2,892,861
			Next	15,000	Th	15,198,257	0.10410		1,582,139		1,582,139
			Next	15,000	Th	11,009,531	0.07864		865,789		865,789
			Over	60,000	Th	80,431,276	0.05745		4,620,777		4,620,777
Total Rate Schedule No. 175					174,902,640		\$1,128,900	\$16,484,897		\$17,613,797	
180	LARGE INTERRUPTIBLE COMMERCIAL & INDUSTRIAL TRANSPORTATION (RS 150 CUSTOMERS)	Annual	1,598	\$600.00			\$958,800			\$958,800	
			First	15,000	Th	21,570,397	0.10166		\$2,192,847		2,192,847
			Next	15,000	Th	18,099,962	0.08076		1,461,753		1,461,753
			Next	70,000	Th	45,277,277	0.05990		2,712,109		2,712,109
			Next	500,000	Th	42,885,089	0.03932		1,686,242		1,686,242
			Over	600,000	Th	13,929,615	0.01846		257,141		257,141
Total Rate Schedule No. 180					141,762,340		\$958,800	\$8,310,091		\$9,268,891	
SUBTOTAL - PAGE 2			5,454		323,369,223		\$2,143,500	\$26,870,665	\$0	\$29,014,165	
TOTAL COMPANY - TARIFFED			6,455,606		808,586,562		\$71,211,192	\$351,248,724	\$7,666,533	\$430,126,449	
OTHER OPERATING REVENUES										3,526,964	
TOTAL COMPANY - TARIFFED AND OTHER OPERATING REVENUES										\$433,653,413	
SPECIAL CONTRACTS			36		128,495,850					\$792,254	
TOTAL COMPANY - TARIFFED AND SPECIAL CONTRACTS			6,455,642		937,082,412					\$434,445,667	

\* - WINTER PERIOD (NOV - APR)  
\*\* - SUMMER PERIOD (MAY - OCT)

SALES 491,921,582  
TRANSPORTATION 316,664,980  
808,586,562

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 565

PUBLIC STAFF RECOMMENDED RATES

Rate Schedule (1)	Description (2)	Season (3)	Monthly Facilities Charge Rate Blocks (4)	Recommended Energy Charge (\$/therm) (5)
101	RESIDENTIAL	Winter Summer	\$10.00 \$10.00	\$0.80749 \$0.73343
102	RESIDENTIAL HIGH EFFICIENCY	Winter Summer	\$10.00 \$10.00	\$0.74175 \$0.66877
115	GAS LIGHTS	Winter Summer	\$10.00 \$10.00	\$0.80749 \$0.73343
125	SMALL GEN. SERVICE	Annual First Next Over	\$17.50 500 Th 4,500 Th 5,000 Th	\$0.67649 \$0.61166 \$0.56448
126	SMALL GEN. SERVICE - COOLING	Annual	\$30.00	\$0.52559
127	SMALL GEN. SERVICE HIGH EFFICIENCY	Annual First Next Over	\$17.50 500 Th 4,500 Th 5,000 Th	\$0.62649 \$0.56166 \$0.51448
135	NATURAL GAS VEHICLE FUEL	Annual		\$0.70130
140	MEDIUM GENERAL SERVICE	Annual First Over	\$100.00 1,000 Th 1,000 Th	\$0.55166 \$0.49448

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 565

PUBLIC STAFF RECOMMENDED RATES

Rate Schedule (1)	Description (2)	Season (3)	Monthly Facilities Charge Rate Blocks (4)	Recommended Energy Charge (\$/therm) (5)
145	LARGE GEN. SERVICE	Annual	\$300.00	
		First	15,000 Th	\$0.43276
		Next	15,000 Th	\$0.41023
		Next	15,000 Th	\$0.39010
		Next	15,000 Th	\$0.36381
		Over	60,000 Th	\$0.34193
150	LARGE INTERRUPTIBLE COMMERCIAL & INDUSTRIAL	Annual	\$600.00	
		First	15,000 Th	\$0.36407
		Next	15,000 Th	\$0.34249
		Next	70,000 Th	\$0.32095
		Next	500,000 Th	\$0.29970
		Over	600,000 Th	\$0.27817
175	LARGE GEN. SERVICE TRANSPORTATION (RS 145 CUSTOMERS)	Annual	\$300.00	
		First	15,000 Th	\$0.14869
		Next	15,000 Th	\$0.12638
		Next	15,000 Th	\$0.10644
		Next	15,000 Th	\$0.08041
		Over	60,000 Th	\$0.05874
180	LARGE INTERRUPTIBLE COMMERCIAL & INDUSTRIAL TRANSPORTATION (RS 150 CUSTOMERS)	Annual	\$600.00	
		First	15,000 Th	\$0.10395
		Next	15,000 Th	\$0.08258
		Next	70,000 Th	\$0.06125
		Next	500,000 Th	\$0.04020
		Over	600,000 Th	\$0.01888