



**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

September 23, 2021

Ms. A. Shonta Dunston, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

Re: Docket No. G-5, Sub 632 – Application of Public Service Company of North Carolina, Inc., for a General Increase in Rates and Charges; and G-5, Sub 634 - Application for Approval to Modify Existing Conservation Programs and Implement New Conservation Programs

Dear Ms. Dunston:

Attached for filing in the above-referenced docket is the testimony and exhibit(s) of Neha R. Patel, Manager, Natural Gas Section, Energy Division.

By copy of this letter, I am forwarding a copy to all parties of record by electronic delivery.

Sincerely,

Electronically submitted  
s/ Gina C. Holt  
Staff Attorney  
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s/ John Little  
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Attachment

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. G-5, SUB 632

DOCKET NO. G-5, SUB 632 )  
)  
In the Matter of )  
Application of Public Service Company )  
of North Carolina, Inc., for an )  
Adjustment of Natural Gas Rates and )  
Charges in North Carolina ) TESTIMONY OF  
) NEHA PATEL  
) PUBLIC STAFF – NORTH  
DOCKET NO. G-5, SUB 634 ) CAROLINA UTILITIES  
) COMMISSION  
)  
In the Matter of )  
)  
Application for Approval to Modify )  
Existing Conservation Programs and )  
Implement New Conservation )  
Programs )

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

**DOCKET NO. G-5, SUB 632**

**DOCKET NO. G-5, SUB 634**

**TESTIMONY OF NEHA PATEL**

**ON BEHALF OF THE PUBLIC STAFF  
NORTH CAROLINA UTILITIES COMMISSION**

**SEPTEMBER 23, 2021**

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

3 A. My name is Neha Patel. My business address is 430 North Salisbury  
4 Street, Dobbs Building, Raleigh, North Carolina. I am the Manager  
5 of the Natural Gas Section of the Energy Division of the Public Staff  
6 – North Carolina Utilities Commission (Public Staff).

7 **Q. BRIEFLY STATE YOUR QUALIFICATIONS AND DUTIES.**

8 A. My qualifications and duties are included in Appendix A.

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

10 A. The purpose of my testimony is to present the results of my  
11 investigation into the application of Public Service Company of North  
12 Carolina, Inc. (PSNC or the Company), for a general rate increase in  
13 this proceeding.

1 Q. WHAT WERE YOUR AREAS OF INVESTIGATIVE  
2 RESPONSIBILITY IN THIS CASE?

3 A. My areas of investigation in this case were: (1) determining the  
4 appropriate sales and transportation volumes and customer levels,  
5 (2) evaluating the proposed weather normalization adjustment for the  
6 test period, (3) calculating the customer growth factors, (4)  
7 calculating the appropriate end-of-period level of revenues, (5) fixed  
8 gas costs and lost and unaccounted for (LUAF) adjustments, (6)  
9 calculating the appropriate level of other operating revenues, (7)  
10 calculating the updated computational factors used in the Customer  
11 Utilization Tracker (CUT) mechanism, (8) general capital additions to  
12 plant, (9) reviewing proposed revisions to the Company's tariff, which  
13 consists of its various rate schedules and service regulations, (10)  
14 evaluating PSNC's request to continue its Commission-approved  
15 Integrity Management Tracker (IMT) mechanism, (11) evaluating  
16 PSNC's programs to defer operating and maintenance (O&M)  
17 expenditures under both its Transmission Integrity Management  
18 Program (TIMP) and Distribution Integrity Management Program  
19 (DIMP), (12) Evaluating PSNC's proposed GREENTHERM™  
20 program, (13) evaluating the Company's Research and  
21 Development proposal, and (14) evaluating PSNC's service quality.

1                    **WEATHER NORMALIZATION AND CUSTOMER GROWTH**

2    **Q.    WHAT IS THE PURPOSE OF ADJUSTING FOR WEATHER**  
3            **NORMALIZATION AND CUSTOMER GROWTH?**

4    A.    Weather normalization attempts to analyze and adjust for the impact  
5           of actual weather conditions over a specified time period (generally,  
6           a test year) on energy consumption relative to expected “normal”  
7           weather conditions (as measured over some longer historical period  
8           of time).

9           The customer growth adjustment adjusts test period revenues by an  
10          amount that represents the growth in sales due to the change in the  
11          number of customers.

12          The Public Staff runs its own weather normalization and customer  
13          growth models and compares the results to those included in the  
14          Company’s general rate case filing.

15          The Public Staff’s linear regression model that computes the  
16          baseload (minimum usage level) and a Heat-Sensitive Factor (HSF)  
17          is similar to that of the Company. Using this linear regression model,  
18          the Public Staff obtained results similar to that of the Company for  
19          comparable customer class usage for the heat sensitive customers.

1 **Q. PLEASE EXPLAIN HEATING DEGREE DAYS (HDDs) AND HOW**  
2 **THEY ARE UTILIZED IN YOUR LINEAR REGRESSION.**

3 A. HDD is a measurement that quantifies the demand for energy  
4 needed for space heating. HDDs are calculated by subtracting the  
5 average daily temperature from a standard temperature of 65  
6 degrees Fahrenheit.<sup>1</sup> For example, a low of 20 degrees and a high  
7 of 40 degrees would yield an average of 30 degrees and an HDD of  
8 35 degrees ( $65 - ((20 + 40)/2)$ ). The normal HDDs are determined  
9 based on a 30-year historical average.

10 To determine customer usage under normal weather conditions, the  
11 Public Staff completed a linear regression to compare the actual  
12 customer usage to the actual HDDs to derive the baseload and the  
13 heat sensitive factors for the test year period. My completed analysis  
14 results in similar regression results to that of the Company.

15 **Q. PLEASE DISCUSS THE PUBLIC STAFF'S GROWTH**  
16 **ADJUSTMENTS TO CUSTOMER BILLS AND CONSUMPTION.**

17 A. The Public Staff compares actual changes in the number of monthly  
18 customer bills between the test year and the year immediately prior.  
19 This comparison produces the average growth rate that the Public

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<sup>1</sup> The use of 65 degrees Fahrenheit is based on an assumption that heating is not needed when the outside temperature is 65 degrees or more.

1 Staff applies to each rate class. Due the COVID-19 pandemic and  
2 the Commission's moratorium on disconnections for non-payment in  
3 effect during the test year, the Company did not disconnect service  
4 for non-payment of bills for a majority of the test period. As a result,  
5 the test period reflects a higher number of customer bills as  
6 compared to prior years. However, in consideration of the anticipated  
7 expiration of the disconnection moratorium, and with new customers  
8 being added to the system, the Public Staff applied a growth rate to  
9 the Residential and the High Efficiency Residential Service customer  
10 classes using the same methodology as the Company in applying  
11 the actual growth factors from customers billed from 2018 through  
12 2019 (when there was no disconnection moratorium in place) to the  
13 above customer classes, as well as, making adjustments to certain  
14 large-volume customers with known and available information.

15 **Q. WHAT TOTAL SALES AND TRANSPORTATION CUSTOMER**  
16 **BILLS AND VOLUME DID YOU USE TO CALCULATE END-OF-**  
17 **PERIOD REVENUES?**

18 A. Based on my analysis, I determined that the appropriate level of end-  
19 of-period sales and transportation customer bills is 7,388,094 and  
20 total sales and transportation volume is 1,318,864,912 therms (ths),  
21 as shown in Patel Exhibit I.

1 Q. PLEASE PROVIDE AN EXPLANATION FOR YOUR  
2 ADJUSTMENTS SHOWN IN PATEL EXHIBIT I.

3 A. Patel Exhibit I, Columns (4) and (5) show the per books number of  
4 bills and the per books sales and transportation volumes segmented  
5 by rate schedule for the test year ended December 31, 2020.  
6 Weather normalized volumes, shown in Column (6), adjusts the  
7 volumes for the heat-sensitive customers (Rate Schedules 101, 102,  
8 125, 127 and 140). The Public Staff and the Company agree on the  
9 weather normalization calculation methodology, although my  
10 adjustments differ slightly from that of the Company's pro forma bills  
11 and usage (ths) due to rounding.

12 **END-OF-PERIOD REVENUE CALCULATIONS**

13 Q. WHAT RATES DID YOU USE TO CALCULATE THE END-OF-  
14 PERIOD PRO FORMA REVENUE LEVEL?

15 A. To calculate the end-of-period pro forma revenue level, I used the  
16 rates approved by the Commission in Docket No. G-5, Sub 633<sup>2</sup> and  
17 the Company's updated IMT rates as approved by the Commission  
18 in Docket No. G-5, Sub 636<sup>3</sup>. These rates exclude any temporary

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<sup>2</sup>Application for Bi-Annual Adjustment of Rates Under Rider C to its Tariff, Order Approving Rate Adjustments Effective April 1, 2020 (March 30, 2021).

<sup>3</sup> Application of Public Service Company of North Carolina, Inc. for Bi-Annual Adjustment of Rates Under Rider E to its Tariff, Order Approving Rate Adjustments Effective September 1, 2020 (August 31, 2020).



1 increments or decrements (temporaries) that were included in rates  
2 at that point in time. This calculation produces what is known as  
3 “clean rates.”

4 **Q. WHY ARE TEMPORARIES REMOVED FROM RATES FOR RATE**  
5 **CASE ANALYSIS?**

6 A. Temporaries are usually associated with deferred account activities  
7 and are not related to revenue generation for the Company. The  
8 margins associated with various rate schedules are typically not  
9 affected by temporaries, except when the temporaries are  
10 associated with fixed gas costs. Temporaries are removed when  
11 calculating end-of-period rates and proposed rates to achieve  
12 consistency and for ease of understanding. After the Commission  
13 determines the proper rates in this case, the new billing rates will be  
14 adjusted for the temporaries currently in effect.

15 **Q. WHAT IS YOUR END-OF-PERIOD REVENUE CALCULATION**  
16 **FOR THE COMPANY?**

17 A. The Company is proposing total end-of-period revenues of  
18 \$574,112,825, which is comprised of sales and transportation of gas  
19 revenues of \$573,392,181 and other operating revenues of  
20 \$720,644. I have calculated end-of-period revenues as shown in  
21 Patel Exhibit II and I have used a three-year average to determine  
22 the appropriate level of other operating revenues.

1 **Q. HOW DID YOU CALCULATE THIS END-OF-PERIOD LEVEL OF**  
2 **REVENUE FOR THE COMPANY?**

3 A. The product of the number of customer bills and facilities charge for  
4 each rate schedule is the facility charge revenue. Likewise, the  
5 volume for each rate schedule was multiplied by the end-of-period  
6 rates to arrive at the total energy revenues. The sum of the revenues  
7 for the total facilities charge for a particular rate schedule, the energy  
8 revenue for that rate schedule, corresponding IMT revenues for that  
9 rate schedule and any CUT adjustments equals the total end-of-  
10 period revenue level as shown on Patel Exhibit II.

11 **GAS COSTS**

12 **Q. DO YOU AGREE WITH THE COMPANY'S ADJUSTMENT TO**  
13 **FIXED GAS COSTS?**

14 A. No. While I do agree with the Company's end of period fixed gas  
15 costs, I have also reflected an on-going level of secondary market  
16 credits in the determination of total fixed gas costs in order to allow  
17 the customers to receive the benefits of the secondary markets  
18 revenues earned each year through reduced rates. I have included  
19 a three-year average for the secondary market credits in my fixed  
20 gas cost calculations as shown in Patel Exhibit III.

21 **CUT MECHANISM**

1 **Q. PLEASE EXPLAIN ANY ADJUSTMENTS REGARDING THE MDT**  
2 **MECHANISM.**

3 A. In this proceeding, the Company filed CUT adjustments to the  
4 Residential, High Efficiency Residential Service, Small General  
5 Service, High Efficiency Small General Service, and Medium  
6 General Service rate schedules. I calculated the normalized usage  
7 for heat sensitive customers on a monthly basis and determined the  
8 “R” factors. This calculation results in an adjustment in an increase  
9 to the Residential, High Efficiency Residential, and Medium General  
10 Service total pro forma revenues and a decrease to the Small  
11 General and High Efficiency Small General Service pro forma  
12 revenues. My results are similar to that of the Company but the  
13 Public Staff’s CUT revenue adjustments differ slightly due to  
14 rounding.

15 **GENERAL CAPITAL ADDITIONS TO PLANT IN SERVICE**

16 **Q. WHAT WERE YOUR AREAS OF INVESTIGATIVE**  
17 **RESPONSIBILITY IN THIS CASE?**

18 A. While I participated in and contributed to a number of areas of the  
19 Public Staff’s investigation, I specifically reviewed or supervised the  
20 review of the following areas:



- 1           •     The Company's Service Regulations will now render  
2                     definitions for, 'Emergency Service', 'Unauthorized Gas',  
3                     'Service Regulations' and 'Tariff'. 'Standard Service' being an  
4                     undefined term in the prior Service Regulations when defining  
5                     'Excess Facilities' has been removed and the proposed  
6                     revision clarifies that the facilities are to provide service at a  
7                     pressure higher than that as specified in the tariff using a farm  
8                     tap.
- 9           •     The Company is also proposing similar administrative  
10                    changes to Appendix A (form for Transportation Pooling  
11                    Agreement) and Appendix B (Gas Quality standards for  
12                    Renewable Gas).
- 13          •     Witness Hinson has proposed changes to update the Special  
14                    Contract Credit amounts, margin percentages by rate class,  
15                    allocation factors, and the annual billing determinants, etc., for  
16                    the IMT mechanism in Rider E as is necessary with each new  
17                    general rate case proceeding. Public Staff witness Perry  
18                    refers to these items in her testimony.

1 **IMT MECHANISM**

2 **Q. PLEASE PROVIDE A BRIEF OVERVIEW OF FEDERAL GAS**  
3 **PIPELINE SAFETY REQUIREMENTS.**

4 A. As discussed by Company witness Randall<sup>4</sup>, pipeline operators are  
5 required to perform integrity measures on their transmission and  
6 distribution pipelines by following the regulatory requirements  
7 imposed by the U.S. Department of Transportation Pipeline and  
8 Hazardous Materials Safety Administration (PHMSA) under its TIMP  
9 and DIMP.

10 The TIMP and DIMP activities are cyclical, are based on timing and  
11 intervals of prior assessments, and vary from year to year.

12 Effective July 1, 2020, PHMSA required all pipeline operators to  
13 comply with the new Gas Transmission “Mega Rule,”<sup>5</sup> which  
14 provides an expansion of the Integrity Management (IM)  
15 requirements for gas transmission pipelines and aims to further  
16 increase the level of safety associated with gas transmission  
17 pipelines. A significant portion of this rule outlines documentation  
18 requiring operators to: (1) Verify pipeline material properties and  
19 attributes: Operators must have information on the material strength

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<sup>4</sup> Direct Testimony of Company witness Randall at 4.

<sup>5</sup> [PHMSA - Pipeline Safety: Safety of Gas Transmission Pipelines](#)

1 properties for all transmission pipe; (2) Reconfirm Maximum  
2 Allowable Operating Pressure (MAOP): This applies to those  
3 transmission pipelines where pressure test records are not  
4 traceable, verifiable and complete (TVC); and (3) Expand IM  
5 requirements outside HCAs: Periodic assessments of pipelines in  
6 populated areas not designated as HCAs to Moderate Consequence  
7 Areas (MCAs).<sup>6</sup>

8 **Q. PLEASE PROVIDE SOME BACKGROUND ON THE COMPANY'S**  
9 **IMT MECHANISM.**

10 A. N.C. Gen. Stat. § 62-133.7A authorizes the Commission to approve  
11 a rate adjustment mechanism to enable a natural gas local  
12 distribution company (LDC) to recover its prudently incurred capital  
13 investments and associated costs of complying with federal gas  
14 pipeline safety requirements. The Commission approved an IMT  
15 mechanism in PSNC's 2016 general rate case<sup>7</sup> and it is contained in  
16 Rider E to PSNC's Service Regulations. The IMT mechanism  
17 excludes recovery of certain costs (Excluded Costs) and includes bi-  
18 annual rate adjustments. The Excluded Costs percentages are

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<sup>6</sup> Moderate Consequence Areas (MCAs) are defined as areas within a potential impact circle containing either five or more buildings intended for human occupancy or any portion of the paved surface, including shoulders, of a designated interstate, freeway, or expressway, or principal arterial roadway with four or more lanes, as defined by the Federal Highway Administration (as compared to 20 buildings which define an HCA).

<sup>7</sup> G-5, Sub 565 Application for a General Rate Increase, Order Approving Rate Adjustments Effective March 1, 2017 (February 28, 2017)

1 intended to reduce the level of non-pipeline safety costs charged to  
2 customers through the IMT mechanism. These costs are still eligible  
3 for recovery in rate base if prudent, in PSNC's next general rate case.

4 On October 4, 2018, an Agreement and Stipulation of Settlement  
5 between Dominion Energy, Inc., SCANA Corporation,  
6 Transcontinental Gas Pipe Line Company, LLC ("Transco"), and the  
7 Public Staff was filed, which included stipulated Regulatory  
8 Conditions and a Code of Conduct ("Merger Settlement")<sup>8</sup>. The  
9 Merger Settlement included a rate moratorium for PSNC from filing  
10 an application for a general rate case before April 1, 2021. On  
11 November 19, 2018, the Commission issued its Order Approving  
12 Merger Subject to Regulatory Conditions and Code of Conduct  
13 ("Merger Order") in Docket Nos. E-22, Sub 551, and G-5, Sub 585<sup>9</sup>.  
14 On June 26, 2020, PSNC filed a petition with the Commission for an  
15 extension of its IMT mechanism in Rider E (without any modification)  
16 until the earlier of two years or the Company's next general rate case.  
17 The Commission granted PSNC's request for an extension to its IMT  
18 mechanism until November 1, 2022 or its next general rate case on  
19 August 10, 2020<sup>10</sup>.

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<sup>8</sup> Joint Application of Dominion Energy Inc. and SCANA Corporation

<sup>9</sup> Order Approving Merger Subject to Regulatory Conditions and Code of Conduct

<sup>10</sup> Order Approving Extension of Integrity Management Tracker



1 PSNC has included, as part of this proceeding, a proposal to  
2 continue operation of this mechanism.

3 Since the Sub 565 rate case, PSNC has applied for and received  
4 Commission approval to implement 10 bi-annual rate changes to  
5 recover the Integrity Management Revenue Requirement (IMRR) on  
6 plant investment through the IMT.

7 The Public Staff reviews and audits PSNC's monthly IMT reports filed  
8 with the Commission through data requests and follow-up  
9 conference calls with Company personnel regarding project scope,  
10 project need, actual project costs incurred, and the nature of IMT-  
11 associated costs. In addition, the Public Staff files an Annual IMT  
12 Report with the Commission on May fifteenth of each year in order  
13 to discuss any issues from the monthly audits, or the IMRR  
14 calculations, summarize the completed IMT projects, and provide the  
15 budgeted IMT projects for the next three years.

16 **Q. PLEASE EXPLAIN YOUR RECOMMENDATION REGARDING**  
17 **PSNC'S REQUEST TO CONTINUE THE IMT MECHANISM.**

18 A. Based on the importance of pipeline safety in complying with federal  
19 safety guidelines and with any additional amendments to PHMSA  
20 regulations, PSNC is required to perform integrity measures on its  
21 transmission and distribution system to protect its customers,

1 employees, contractors and the general public. I recommend the IMT  
2 mechanism remain in place.

3 **DEFERRED TIMP-RELATED O&M COSTS**

4 The Commission has approved deferred accounting treatment for  
5 the Company's TIMP O&M costs incurred due to the pipeline safety  
6 regulations promulgated by PHMSA. Since the last general rate  
7 case, the Company has enacted significant measures to conform to  
8 the regulations promulgated by PHMSA. Under PHMSA, pipeline  
9 operators are mandated to identify High Consequence Areas  
10 (HCAs), or covered segments, in order to identify threats to their  
11 pipelines; identify and analyze the risk to help prioritize assessments;  
12 remediate conditions found during integrity assessments; maintain  
13 records; and implement preventative and mitigative measures.  
14 Based on PHMSA guidelines, operators must perform pipeline  
15 reassessments which drives up the costs added to the rate base  
16 while allowing the Company to mitigate threats and risks identified  
17 on these pipelines and ensure safety on their transmission lines. I  
18 recommend that PSNC be allowed to continue its deferral  
19 mechanism under TIMP until the resolution of the Company's next  
20 general rate case proceeding.

1 In order to have more transparency with the audits, I further  
2 recommend that the Company work with the Public Staff to  
3 segregate TIMP costs by pipeline pigging segments or sub-projects  
4 for better tracking purposes and to continue providing program  
5 updates to the Commission, including the project scope/description,  
6 in the monthly filings, as well as providing the budgeted and actual  
7 costs incurred in an annual filing to provide the TIMP costs and  
8 invoices from the prior 12-month period. While my area of  
9 investigation focused on the necessity of this mechanism, Public  
10 Staff accounting witness Feasel discusses the audit of these costs in  
11 the rate case.

12 **DEFERRED DIMP-RELATED O&M COSTS**

13 **Q. PLEASE DISCUSS YOUR REVIEW OF THE COMPANY'S**  
14 **DEFERRED DIMP-RELATED O&M COMPLIANCE COSTS.**

15 A. The Commission has approved deferred accounting treatment for  
16 PSNC's DIMP O&M costs associated with PHMSA regulatory  
17 compliance. Among other areas, the Company's DIMP primarily  
18 covers the following areas of pipeline safety:

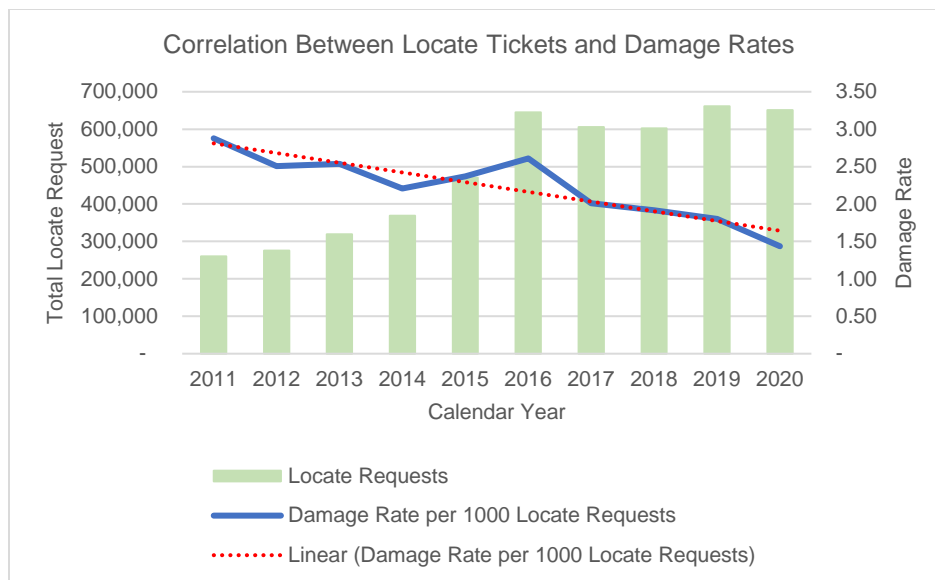
- 1           1.     Inspection/Practices: (a) Enhanced leak survey, (b) legacy  
2                     cross bore, (c) Gold Shovel Standard certification<sup>11</sup>, and (e)  
3                     locatability investigations/repair untoneable assets;
- 4           2.     Enhanced Cathodic Protection: (a) Anode replacement, Close  
5                     internal surveys, AC mitigation;
- 6           3.     Safety    Communications/Public    Awareness:    Damage  
7                     prevention, 811-verification; and
- 8           4.     Records: mapping services in the GIS.

9           The Company noted that third party contractors are engaged to  
10           perform the work covered by these programs, however due to the  
11           COVID-19 pandemic; the Company has experienced a delay in the  
12           implementation of some of the DIMP programs.

13           As part of my investigation, I reviewed data request responses from  
14           the Company regarding the DIMP-related O&M project scope and  
15           associated costs. Under damage prevention program, I reviewed  
16           data from 2011 to 2020 from federal pipeline safety regulators related  
17           to the Company's annual damage rates and the relationship to the  
18           number of locate requests. Patel Figure 1 below shows the history of  
19           locate requests and the associated damage rates per 1000 locate  
20           tickets.

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<sup>11</sup> Gold Shovel Standard



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2

### Patel Figure 1

3

From 2011 to 2014, the Company received approximately 300,000 locate requests in any given year, and the damage rate averaged 2.51 damage incidents annually. After 2014, the damage rate increased; reaching a high of about 2.75, before declining substantially over the last four years despite an increase in locate requests.

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The Company implemented measures to reduce third party damages such as mailers to registered excavation companies within the Company's service territory and newspaper, billboard, US mail, signage and social media advertising. The Company has various public awareness programs in place to help reduce third party damage incidents. They are: (1) Risk Ranking "811" tickets, and Watch & Protect Program; (2) Untoneable Repair Program; and (3)

1 Geofencing. Such measures have had a positive impact on the  
2 damage ratio to its infrastructure; nevertheless, the Public Staff will  
3 continue to analyze this data to assess the impacts of the programs.

4 **Q. WHAT IS YOUR RECOMMENDATION REGARDING THE**  
5 **COMPANY'S DEFERRED DIMP O&M EXPENSES?**

6 A. The issue of pipeline safety, and specifically the testing of LDCs'  
7 systems, along with the implementation of safety programs, has  
8 come to the forefront in the past 10 to 15 years. The focus was  
9 initially on transmission systems and now includes distribution  
10 systems as well. The Company has incurred significant expenses to  
11 address pipeline safety and remain compliant with PHMSA  
12 regulations, which have been amended as recently as 2019 to  
13 expand obligations.<sup>12</sup>

14 The primary cost drivers affecting the Company's forecast include  
15 contracted labor to meet safety compliance and documentation per  
16 federal DIMP regulatory requirements. It is difficult to put a cost on  
17 pipeline safety and the prevention of property damage and personal  
18 injury or death that can occur from a natural gas incident.

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<sup>12</sup> Direct Testimony of Company witness Randall at page 6.

1 I recommend that PSNC be allowed to continue its deferral  
2 mechanism until the resolution of the Company's next general rate  
3 case proceeding, and that the Company provide to the Commission  
4 annual program updates including project scope, and the budgeted  
5 and actual costs incurred in an annual filing to provide the DIMP  
6 costs and invoices from the prior 12-month period.. While my area of  
7 investigation of focused on the necessity of this mechanism, Public  
8 Staff accounting witness Feasel discusses the audit of these costs in  
9 the rate case.

10 **GREENTHERM™ PROGRAM**

11 **Q. HAS THE PUBLIC STAFF REVIEWED THE COMPANY'S**  
12 **PROPOSAL TO OFFER A VOLUNTARY RENEWABLE ENERGY**  
13 **PROGRAM ALLOWING CUSTOMERS TO SUPPORT THE**  
14 **DEVELOPMENT OF RENEWABLE ENERGY BY PURCHASING**  
15 **“GREEN ATTRIBUTES” OF RENEWABLE NATURAL GAS?**

16 **A.** Yes. The Company is proposing to offer a GreenTherm™ Program<sup>13</sup>  
17 modeled on a program offered by its affiliate Dominion Energy Utah.  
18 Customers would participate by paying a monthly surcharge to  
19 purchase a block of green attributes equal to five therms of  
20 renewable natural gas. PSNC plans to issue a Request for Proposals

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<sup>13</sup> Testimony of Company witness Randall (GreenTherm™ program, pg. 17)

1 (RFP) if the Commission approves the program. Based on the results  
2 of the RFP, the Company will determine the appropriate rate for a  
3 five-therm block.

4 **Q. WHAT IS THE PUBLIC STAFF'S RECOMMENDATION**  
5 **REGARDING THE PROPOSED GREENTHERM™ PROGRAM?**

6 A. The Public Staff supports PSNC's development of a voluntary  
7 program allowing customers to support the development of  
8 renewable gas and recommends that the Commission order PSNC  
9 to proceed with the development of the program. However, the Public  
10 Staff does not believe that the program should receive final approval  
11 until the Company has received the results of the RFP, determined  
12 the cost of a block of five therms, and determined its sources for  
13 renewable gas. The Public Staff also believes the PSNC should  
14 ensure that its green attributes meet certain standards and are  
15 certified, such as the standards and certification offered by Green-  
16 e®.<sup>14</sup> The Company has also informed the Public Staff that it may  
17 also offer carbon offsets through this program or a separate program.  
18 Once the Company has fully developed the program, the Company  
19 should update its proposal and file it with the Commission.

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<sup>14</sup> <https://www.green-e.org/renewable-fuels>



1

**RESEARCH AND DEVELOPMENT**

2

**Q. WHAT IS YOUR RECOMMENDATION REGARDING THE COMPANY'S PROPOSED ADJUSTMENTS ON ITS R&D EFFORTS?**

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A. PSNC has proposed in this rate case a project that focuses on studying the effects of blending hydrogen with natural gas in determining its safety and viability in the testimony of Company witness Randall, and witness Spaulding has the proposed adjustment of \$285,000 to fund this initiative. An affiliated gas utility in Utah has a similar pilot project underway, which is studying the feasibility of hydrogen blending, its availability, storage and pricing. Not having retained any contractors for this study, the program costs as reflected in witness Spaulding's exhibits are based on an estimate from the Utah pilot project. Company responses to Public Staff data requests have not provided any costs specific to this program for North Carolina. The Public Staff should be given the opportunity to examine such new projects and make recommendations to the Commission before its implementation. Therefore, the Public Staff does not agree the Company's proposal of approving this project and allowing the R&D costs to be recovered.

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**PSNC'S QUALITY OF SERVICE**

1 **Q. WHAT FACTORS DID YOU CONSIDER IN YOUR EVALUATION**  
2 **OF PSNC'S OVERALL QUALITY OF SERVICE PROVIDED TO ITS**  
3 **CUSTOMERS?**

4 A. I reviewed the following information in my evaluation of PSNC's  
5 quality of service:

- 6 • Informal complaints and inquiries from PSNC customers  
7 received by the Public Staff's Consumer Services Division;
- 8 • Customer Call Center Monthly Reports filed in Docket No. G-  
9 100, Sub 96PSNC;
- 10 • Data on pipeline incident and damage rates (see Patel Figure  
11 3); and
- 12 • Company initiatives that impact the level of service being  
13 provided to customers.

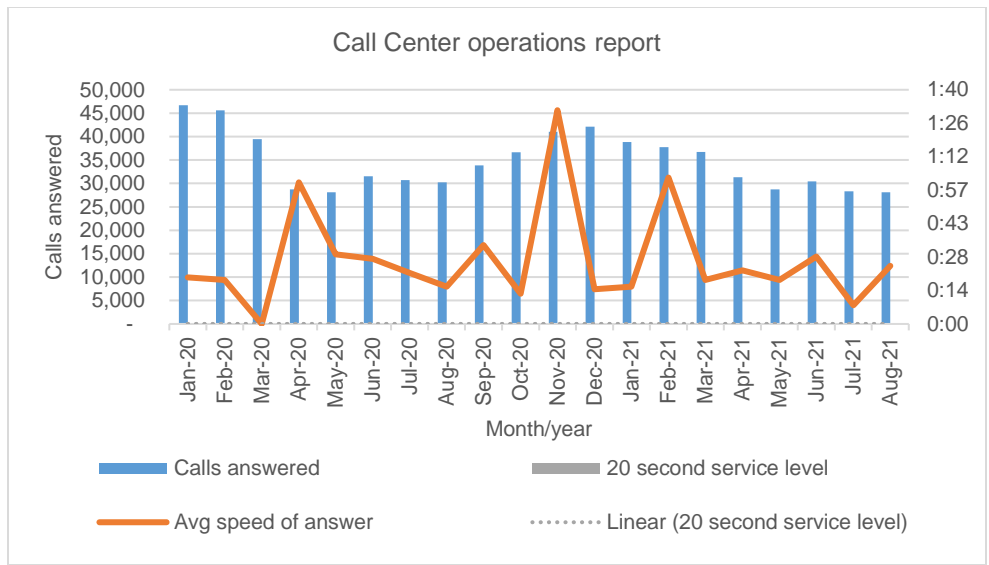
14 **Q. WHAT TYPES OF CUSTOMER COMPLAINTS AND INQUIRIES**  
15 **HAVE BEEN RECEIVED BY THE PUBLIC STAFF'S CONSUMER**  
16 **SERVICES DIVISION?**

17 A. For the period January 2016 through April 2021, the Public Staff's  
18 Consumer Services Division received approximately 499 contacts  
19 from PSNC customers. Of those contacts, 78% related to billing and  
20 payment issues including the establishment or modification of  
21 payment arrangements and questions about current customer bills.  
22 The remaining 22% involved rate, service, and meter-related issues.

1 Q. PLEASE DESCRIBE THE OTHER DATA USED IN YOUR  
2 REVIEW.

3 A. The other data used in my review were obtained through PSNC's  
4 Commission-required filings and responses to Public Staff data  
5 requests. I was able to analyze the Company's: (1) call center  
6 response times to customer inquiries, (2) response times to  
7 emergency response calls/events, and (3) the correlation between  
8 damage rates and the number of locate request tickets issued to the  
9 Company.

10 With regard to the Customer Call Center information filed in Docket  
11 No. G-100, Sub 96PSNC, from January 2020 to August 2021, the  
12 Company and its third party call centers answered 694,788 calls with  
13 an answer rate of 98%. In addition to the number of calls answered  
14 by customer service representatives, the Company's Interactive  
15 Voice Response (IVR) answering system handled an additional  
16 472,484 calls during this same timeframe. Per G-100, Sub 96PSNC  
17 Reports, on average, the Company's performance on the "20 second  
18 service level" to customer calls has an overall high performance of  
19 answering calls within 20 seconds as can be seen from Patel Figure  
20 2 below, while also focusing on improving call response time during  
21 the winter months.



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Patel Figure 2

**Q. HOW WOULD YOU RATE PSNC’S SERVICE QUALITY?**

A. Based on my investigation, I believe the overall quality of service provided by PSNC to its North Carolina customers is adequate at this time.

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

A. Yes, it does.

**QUALIFICATIONS AND EXPERIENCE**

NEHA PATEL

I graduated from the University Of Mumbai in 1995 with a Bachelor of Science degree in Electronic Engineering. I began working as a Utilities Engineer with the Natural Gas Division of the Public Staff in the spring of 2014. In 2020, I became Manager of the Natural Gas Section of the Energy Division.

I have worked on purchased gas cost adjustment procedures, tariff filings, customer utilization trackers, special contract review and analysis, weather normalization adjustments, customer complaint resolutions, integrity management riders, franchise exchange filings, compressed natural gas special contracts, peak day demand and capacity calculations, fuel and electric usage trackers, gas resellers, annual review of gas costs proceedings, renewable natural gas filings, cost of service studies, general rate case proceedings, and rate design.

PUBLIC STAFF  
 PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
 SUMMARY OF VOLUME AND BILL ADJUSTMENT  
 DOCKET G-5, Sub 632

RATE SCHEDULE (1)	DESCRIPTION (2)	E A S E O N (3)	BILLS/ DEMAND UNITS (4)	VOLUMES (Ths) (5)	WEATHER NORMALIZATION		CUSTOMER GROWTH		TOTAL	
					ADJUSTMENT (Ths) (6)	TOTAL (Ths) (7) (5) + (6)	(BILLS) (8)	ADJUSTMENT (Ths) (9)	(BILLS) (10) (4) + (8)	(DTS) (11) (7) + (9)
101 Residential Service		W	3,246,165	219,794,290	58,323,110	278,117,400	84,400	7,231,025	3,330,565	285,348,425
101 Residential Service		S	3,248,885	47,987,967	(9,262,415)	38,725,552	84,471	1,006,858	3,333,356	39,732,410
102 HE Residential Service		W	76,392	4,650,754	1,082,442	5,733,196	7,350	551,604	83,742	6,284,800
102 HE Residential Service		S	77,147	1,140,830	(221,032)	919,798	7,421	68,479	84,568	1,008,277
115 Open Flame (Gas Light)		W	281	33,714	-	33,714	-	-	281	33,714
115 Open Flame (Gas Light)		S	277	33,556	-	33,556	-	-	277	33,556
125 Small General Service	First 500 ths		533,875	67,672,208	19,621,522	87,293,730	-	-	533,875	87,293,730
	Next 4,500 ths			37,299,642	10,815,012	48,114,654	-	-		48,114,654
	All Over 5,000 ths			320,475	92,922	413,397	-	-		413,397
126 Small General Service Cooling			48	42,260	-	42,260	-	-	48	42,260
127 HE Small General Service	First 500 ths		1,254	328,563	41,686	370,249	-	-	1,254	370,249
	Next 4,500 ths			688,196	87,314	775,510	-	-		775,510
	All Over 5,000 ths			59,711	7,576	67,287	-	-		67,287
135 Natural Gas Vehicle Fuel		W	-	57,250	-	57,250	-	-	-	57,250
		S	-	100,641	-	100,641	-	-	-	100,641
140 Medium General Service	First 1,000 Ths		11,876	10,147,261	1,351,393	11,498,654	-	-	11,876	11,498,654
	All Over 1,000 Ths			21,470,504	2,859,402	24,329,906	-	-		24,329,906
145 Large General Service	First 15,000 Ths		3,133	25,709,920	-	25,709,920	-	-	3,133	25,709,920
	Next 15,000 Ths			6,868,036	-	6,868,036	-	-		6,868,036
	Next 15,000 Ths			3,814,813	-	3,814,813	-	-		3,814,813
	Next 15,000 Ths			2,610,463	-	2,610,463	-	-		2,610,463
	Next 1,000,000 Ths			7,067,001	-	7,067,001	-	-		7,067,001
	Over 1,060,000 Ths			-	-	-	-	-		-
150 Interruptible Service	First 15,000 Ths		103	1,278,460	-	1,278,460	-	-	103	1,278,460
	Next 15,000 Ths			969,240	-	969,240	-	-		969,240
	Next 70,000 Ths			2,623,900	-	2,623,900	-	-		2,623,900
	Next 500,000 Ths			2,967,960	-	2,967,960	-	-		2,967,960
	All Over 600,000 Ths			-	-	-	-	-		-
175 Large General Transportation Service	First 15,000 Ths		3,663	43,775,946	-	43,775,946	-	-	3,663	43,775,946
	Next 15,000 Ths			23,662,709	-	23,662,709	-	-		23,662,709
	Next 15,000 Ths			16,090,255	-	16,090,255	-	-		16,090,255
	Next 15,000 Ths			11,864,080	-	11,864,080	-	-		11,864,080
	Next 1,000,000 Ths			97,680,420	-	97,680,420	-	-		97,680,420
	All Over 1,060,000 Ths			17,577,890	-	17,577,890	-	-		17,577,890
180 Interruptible Transportation Service	First 15,000 Ths		1,293	17,511,730	-	17,511,730	-	-	1,293	17,511,730
	Next 15,000 Ths			14,888,370	-	14,888,370	-	-		14,888,370
	Next 70,000 Ths			38,767,090	-	38,767,090	-	-		38,767,090
	Next 500,000 Ths			45,356,760	-	45,356,760	-	-		45,356,760
	All Over 600,000 Ths			18,795,150	-	18,795,150	-	-		18,795,150
Special Contracts		W	30	223,378,520	-	223,378,520	-	(58,738,520)	30	164,640,000
Special Contracts		S	30	219,131,370	-	219,131,370	-	29,708,630	30	248,840,000
<b>Subtotal w/Power Generation</b>			<b>7,204,452</b>	<b>1,254,217,905</b>	<b>84,798,931</b>	<b>1,339,016,836</b>	<b>183,642</b>	<b>(20,151,923.89)</b>	<b>7,388,094</b>	<b>1,318,864,912</b>
<b>Subtotal w/o Power Generation</b>			<b>7,204,392</b>	<b>811,708,015</b>	<b>84,798,931</b>	<b>896,506,946</b>	<b>183,642</b>	<b>8,877,966</b>	<b>7,388,034</b>	<b>905,384,912</b>
<b>Total</b>			<b>7,204,452</b>	<b>1,254,217,905</b>	<b>84,798,931</b>	<b>1,339,016,836</b>	<b>183,642</b>	<b>(20,151,924)</b>	<b>7,388,094</b>	<b>1,318,864,912</b>

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.  
PUBLIC STAFF END-OF-PERIOD REVENUE LEVEL  
Docket G-5, Sub 632

RATE SCHEDULE (1)	DESCRIPTION (2)	SEASON (3)	NUMBER OF BILLS (4)	MONTHLY FACILITIES CHARGE (5)	MONTHLY DEMAND CHARGE (6)	VOLUMES (TH) (7)	END-OF PERIOD RATES (\$/TH) (8)	FACILITIES CHARGE REVENUES (9)	ENERGY CHARGE REVENUES (10)	MARGIN DECOUPLING ADJUSTMENT (11)	INTEGRITY MANAGEMENT RIDER REVENUES (12)	TOTAL REVENUES (13)	
101	Residential Service	Winter Summer	3,330,565 3,333,356	\$10.00 10.00		285,348,425 39,732,410	\$0.7971 \$0.7311	\$33,305,653 \$33,333,560	\$227,436,962 \$29,046,378	4,150,950 2,117,908	\$22,909,034	\$264,893,565 \$64,497,846	
			6,663,921			325,080,835		\$66,639,213	\$256,483,340	6,268,858		\$352,300,442	
102	HE Residential Service	Winter Summer	83,742 84,568	\$10.00 10.00		6,284,800 1,008,277	\$0.7471 \$0.6811	\$837,420 \$845,680	\$4,695,060 \$886,687	40,224 47,670	513,956	\$5,572,703 \$1,580,037	
			168,310			7,293,077		\$1,683,100	\$5,381,747	87,894		\$7,666,697	
115	Open Flame (Gas Light)	Winter Summer	281 277	\$10.00 10.00		33,714 33,556	0.7970 0.7310	2,810 2,770	26,871 24,531	- -	4,741	29,681 27,301	
			558			67,270		5,580	51,402	-		61,723	
125	Small General Service	First Next All Over	500 4,500 5000	ths ths ths	\$17.50	533,875	87,293,730 48,114,654 413,397	\$0.6770 \$0.6270 \$0.5770	\$9,342,813 \$30,165,963 \$238,513	\$59,094,363 \$(939,779) \$(17,989) (4,451)	5,245,233	58,154,584 29,647,975 234,063	
						135,821,780		\$89,498,840	(1,462,218)			88,036,622	
	<b>Total Rate Schedule 125</b>		533,875			135,821,780		\$9,342,813	\$89,498,840	\$(1,462,218)		102,624,668	
126	Small General Service Cooling	ths	48	\$30.00		42,260	0.5770	1,440	24,382	-	1,632	25,822	
	<b>Total Rate Schedule 126</b>		48			42,260		\$1,440	\$24,382	-		\$27,454	
127	HE Small General Service	First Next All Over	500 4,500 5000	ths ths ths	\$17.50	1,254	370,248 779,510 67,287	0.6270 0.5770 0.5270	21,945 447,469 35,460	232,146 (15,822) (1,373)	48,846	224,882 431,648 34,087	
						1,213,045			715,075	(24,748)		690,327	
	<b>Total Rate Schedule 127</b>		1,254			1,213,045		\$21,945	\$715,075	\$(24,748)		\$769,070	
135	Natural Gas Vehicle Fuel Customer Stations	ths Winter Summer	-			157,891	\$7,250 100,841 \$0.7314	\$0.7314 -	\$41,871 \$73,606			\$41,871 73,606	
	<b>Total Rate Schedule 135</b>		-			157,891		-	\$115,477			\$115,477	
140	Medium General Service	First All Over	1,000 1,000	ths ths	\$100.00	11,876	11,498,654 24,329,906	0.5789 0.5287	\$1,187,600 12,863,951	6,656,916 150,999	71,364 150,999	1,383,645	6,728,280 13,014,950
						35,828,560		19,520,867	222,364			19,743,231	
	<b>Total Rate Schedule 140</b>		11,876			35,828,560		1,187,600	19,520,867	222,364		22,314,478	
145	Large General Sales Service	First Next Next Next Next All Over	15,000 15,000 15,000 15,000 1,000,000 1,000,000	ths ths ths ths ths ths	\$300.00	3,133	25,709,920 6,868,036 3,814,813 2,810,463 7,067,001 -	0.4481 0.4272 0.4096 0.3842 0.3639 0.3474	\$939,900 2,934,025 1,558,542 1,000,914 2,571,823 -	11,519,844 2,934,025 1,558,542 1,000,914 2,571,823 -	436,125	11,519,844 2,934,025 1,558,542 1,000,914 2,571,823 -	
						46,070,233			\$19,587,147			\$19,587,147	
	<b>Total Rate Schedule 145</b>		3,133			46,070,233		\$99,900	\$19,587,147			20,963,173	
150	Interruptible Sales Service	First Next Next Next All Over	15,000 15,000 70,000 500,000 600,000	ths ths ths ths ths	\$600.00	103	1,278,460 989,240 2,623,900 2,967,960 -	0.3827 0.3627 0.3427 0.3231 0.3031	\$61,800 489,241 899,263 958,799 -	489,241 351,534 899,263 958,799 -	53,968	489,241 351,534 899,263 958,799 -	
						7,839,560			\$2,698,837			\$2,698,837	
	<b>Total Rate Schedule 150</b>		103			7,839,560		\$61,800	\$2,698,837			\$2,814,606	
175	Large General Transportation Service	First Next Next Next All Over	15,000 15,000 15,000 15,000 1,000,000	ths ths ths ths ths	\$300.00	3,663	43,775,946 23,662,709 16,090,255 11,864,080 97,680,420 17,577,890	0.1390 0.1184 0.0999 0.0758 0.0507 0.0487	1,098,900 2,800,482 1,607,256 899,179 5,445,739 856,395	6,084,856 2,800,482 1,607,256 899,179 5,445,739 856,395	1,994,137	6,084,856 2,800,482 1,607,256 899,179 5,445,739 856,395	
						210,651,300			\$17,691,897			\$17,691,897	
	<b>Total Rate Schedule 175</b>		3,663			210,651,300		1,098,900	\$17,691,897			\$20,784,934	
180	Interruptible Transportation Service	First Next Next Next All Over	15,000 15,000 70,000 500,000 600,000	ths ths ths ths ths	\$600.00	1,293	17,511,730 14,888,370 38,707,090 45,356,790 18,795,150	0.0976 0.0778 0.0590 0.0386 0.0188	\$775,800 1,708,444 2,248,267 1,748,503 353,349	1,708,444 1,158,017 2,248,267 1,748,503 353,349	931,545	1,708,444 1,158,017 2,248,267 1,748,503 353,349	
						135,319,100			\$7,217,580			\$7,217,580	
	<b>Total Rate Schedule 180</b>		1,293			135,319,100		775,800	\$7,217,580			\$8,934,926	
Special Contracts		ths ths	30 60	\$0.00 \$0.00		164,640,000 248,840,000			\$16,913,171 \$17,326,171			\$16,913,171 \$17,326,171	
			90			413,480,000			\$34,239,341			\$34,239,341	
<b>TOTAL COMPANY</b>			7,388,094 bills			1,318,864,912	ths	\$81,758,091	\$453,225,934	\$5,092,150	33,520,862	\$573,596,989	
<b>OTHER OPERATING REVENUES</b>												\$3,005,303	
<b>TOTAL OPERATING REVENUES</b>												\$576,602,288	
<b>Sales</b>												\$509,647,785	
<b>Transportation</b>												\$28,709,860	
<b>Total Sales &amp; Transportation</b>												\$538,357,645	
<b>Special contracts</b>												\$34,239,341	
<b>Sub Total</b>												\$573,596,985	
<b>Other Operating Revenue</b>												\$3,005,303	
<b>Total</b>												\$576,602,288	

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Sep 23 2021

Public Service Company of North Carolina, Inc.  
Docket No. G-5, Sub 632  
For the Test Year Ended December 31, 2020

Pipeline	Contract Number	Rate Schedule	MDTQ	Demand Rate	Months/ Days	Amount	Pipeline Total
<b>I. Fixed Costs</b>							
<b>Transportation Demand Charges:</b>							
DTI	700013	FTNN-GSS	11,669	\$4.17410	5	243,538	
DTI	700036	FTNN-GSS	18,000	\$4.17410	5	375,669	
DTI	100035	FTNN	18,331	\$4.17410	12	918,185	
DTI	100103	FTNN	12,000	\$4.17410	12	601,070	
DTI	100051	FTNN	10,000	\$4.17410	12	500,892	
DTI	200085	FT	5,035	\$6.20210	12	374,731	3,014,085
TGT	29970	FT 1-4	5,272	\$0.28420	365	546,880	546,880
Transco	1004190	FT, Zn 4-5	4,643	\$0.38176	61	108,123	
Transco	1004190	FT, Zn 4-5	30,754	\$0.38176	61	716,179	
Transco	1004190	FT, Zn 4-5	5,159	\$0.38176	90	177,255	
Transco	1004190	FT, Zn 4-5	34,171	\$0.38176	90	1,174,061	2,175,619
Transco	1004996	FT, Zn 1-5	739	\$0.87626	90	58,279	
Transco	1004996	FT, Zn 2-5	1,087	\$0.85217	90	83,349	
Transco	1004996	FT, Zn 3-5	2,521	\$0.78911	90	179,060	320,688
Transco	1002264	FT, Zn 1-5	385	\$0.48308	365	67,885	
Transco	1002264	FT, Zn 2-5	566	\$0.46959	365	97,013	
Transco	1002264	FT, Zn 3-5	1,313	\$0.43427	365	208,122	373,019
Transco	1003703	FT, Zn 1-5	27,906	\$0.48308	365	4,920,503	
Transco	1003703	FT, Zn 2-5	41,037	\$0.46959	365	7,033,756	
Transco	1003703	FT, Zn 3-5	95,208	\$0.43427	365	15,091,282	27,045,541
Transco	1006505	FT, Zn 3-6	30	\$0.51153	365	5,601	
Transco	1006505	FT, Zn 2-6	1,371	\$0.54685	365	273,652	279,253
Transco	1012381	FT, Zn 6	5,175	\$0.12806	365	241,889	241,889
Transco	1012028	FT, Zn 4-5	44,627	\$0.38176	365	6,218,433	6,218,433
Transco	9103562	FT, Zn 3-5	20,000	\$0.27275	365	1,991,075	1,991,075
Transco	9178381	FT, Zn 6-4	100,000	\$0.55515	365	20,262,975	20,262,975
Transco	9130053	FT, Zn 3-6	208	\$0.51153	365	38,835	38,835
Transco	9130053	FT, Zn 2-6	9,425	\$0.54685	365	1,881,232	1,881,232
Transco	9238274	FT, Zn 3-5	60,000	\$0.64578	365	14,142,582	14,142,582
Cove Point LNG	1003	FTS	25,000	\$0.56310	12	168,930	168,930
Cardinal	9125343	Zone 2	50,000	\$0.08100	365	1,478,250	
Cardinal	1031995	Zone 2	103,500	\$0.08100	365	3,059,978	
Cardinal	1031994	Zone 1B	72,450	\$0.03930	365	1,039,259	5,577,487
Columbia	49530	SST	35,335	\$6.89100	6	1,460,961	
Columbia	49530	SST	17,667	\$6.89100	6	730,460	2,191,421
East TN Patriot	410097	FT-A	30,000	\$9.29000	12	3,344,400	3,344,400
East TN Patriot	410333 & 8	FT-A	20,000	\$9.29000	12	2,229,600	2,229,600
Texas Eastern Transmission				\$46,944	12	563,328	563,328
Piedmont (Town of Faith redelivery agreement)				\$760	12	9,120	9,120
EDF				147,000	12	1,764,000	1,764,000
<b>Total Transportation</b>							<b>94,380,393</b>
Pipeline	Contract Number	Rate [\$]/dt	Storage Quantity	Daily Demand	Months/ Days	Amount	Service Total
<b>Storage Charges Transco</b>							
GSS	1000732						
Demand		\$0.10555		33,218	365	1,279,748	
Capacity		\$0.00063	1,835,944		365	422,175	1,701,924
WSS	9019052						
Demand		\$0.03102		29,416	365	333,057	
Capacity		\$0.00033	2,794,500		365	336,598	669,654
LG-A	9019071						
Demand		\$0.10316		5,175	365	194,856	
Capacity		\$0.01988	25,875		365	187,754	382,611
ESS	9011146						
Demand		\$0.03901		37,717	365	537,039	
Capacity		\$0.00486	318,271		365	564,581	1,101,620
Eminence	9050453						
Demand		\$0.03901		38,545	365	548,829	
Capacity		\$0.00486	321,950		365	571,107	1,119,936
Columbia FSS							
Demand		\$1.50100		35,335	12	636,454	
Capacity		\$0.02880	3,180,150		12	1,099,060	1,735,514
Cove Point LNG							
resv chg - FPS-1		\$3.29510		25,000	12	988,530	988,530
DTI GSS							
Demand		\$1.87160		62,669	12	1,407,496	
Capacity		\$0.01450	3,856,000		12	670,944	2,078,440
Pine Needle LNG							
Resv chg		\$0.07602		103,500	365	2,871,846	2,871,846
Saltville							
Demand		\$0.11670	600,000		12	840,240	
Inj Reserve		\$4.00000		13,333	12	639,984	
WD Reserve		\$2.00000		30,000	12	720,000	2,200,224
Saltville							
Demand	420034	\$0.11670	200,000		12	280,080	
Inj Reserve		\$4.00000		10,000	12	480,000	
WD Reserve		\$2.00000		20,000	12	480,000	1,240,080
Total Storage							\$16,090,377
Secondary Market Credits							(23,248,469)
<b>Total Fixed Gas Costs (Demand charges)</b>							<b>\$87,222,302</b>
<b>II. Commodity Costs (Annual qty):</b>							
Sales		\$0.2500	559,414,512				139,853,628
Unaccounted For Gas		\$0.2500	8,836,557				2,209,139
Commodity Costs - Power Generation & Special Contracts							-
<b>Total Commodity Gas Cost</b>			568,251,068				<b>142,062,767</b>
<b>III. Deferred fixed gas cost, CU&amp;LAF:</b>							
							(33,419,626)
<b>IV. Total Gas Cost</b>							
							<b>195,865,443</b>