PLACE: Dobbs Building
Raleigh, North Carolina
DATE: Tuesday, March 6, 2018
TIME: 10:00 a.m. - 10:12 a.m.
DOCKET NO: G-40, Sub 145
BEFORE: Commissioner Charlotte A. Mitchell, Presiding

IN THE MATTER OF:

Frontier Natural Gas Company, LLC
Application for Annual Review of Gas Costs
Pursuant to G.S. 62-133.4(c) and
Commission Rule R1-17(k)(6)

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

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P R O C E E D I N G S

COMMISSIONER MITCHELL: Good morning. Let's come to order, please, and go on the record. I'm Commissioner Charlotte A. Mitchell with the North Carolina Utilities Commission and have been assigned to preside over the hearing this morning. The two other Commissioners serving on this panel with me are Commissioner ToNola D. Brown-Bland and Commissioner Lyons Gray. Those Commissioners, Brown-Bland and Gray, are presently engaged in the Duke Energy Carolinas rate case proceeding this morning that is going on simultaneously with this hearing.

The Commission now calls for hearing docket Number G-40, Sub 145, In the Matter of Application of Frontier Natural Gas Company for Annual Review of Gas Costs Pursuant to G.S. 62-133.4(c) and Commission Rule R1-17(k)(6).

G.S. 62-133.4(c) requires each natural gas local distribution company to submit annually to the Commission information concerning the utility's actual cost of gas and purchased sales and transportation volumes for historical 12-month test period. The Commission reviews the information in order to compare the utility's prudently incurred costs with costs actually recovered from customers served during the test period and to determine the propriety of an adjustment to rates based on any differences between prudently incurred costs and recovered costs.

Commission Rule R1-17(k)(6) provides Frontier -- provides for Frontier to file its required information on or before December 1st of each year based on a test period ending September 30th. The rule further provides that the Commission shall schedule a public hearing annually on the first Tuesday of March pursuant to G.S. 62-133.4(c) for review of gas costs incurred and those recovered from all customers served during that test period.

On December 1, 2017, Frontier Natural Gas Company prefiled the direct testimony of Fred A. Steele, along with Schedules 1 through 4, 8, 10 and 11, and Confidential Exhibits A and B, and Exhibit C.

On December 6, 2017, the Commission issued its Order Scheduling Hearing, Requiring Filing of Testimony, Issuing Discovery Guidelines and Requiring Public Notice, which scheduled this annual review proceeding for public hearing at this time and place.

On February 22, 2018, the North Carolina Utilities Commission - Public Staff filed the Joint

Testimony of Jan A. Larsen, Shawn L. Dorgan and Julie G. Perry.

On February 27th, the Public Staff filed a revised copy of pages 9, 10 and 22 of this joint testimony.

The intervention and participation in this docket by the Public Staff is recognized and made pursuant to G.S. 62-15(d) and Commission Rule R1-19(e).

On March 1, 2018, the following documents were filed: Frontier filed the rebuttal testimony of Fred A. Steele; Frontier and the Public Staff filed a Joint Motion to Excuse Appearance of Witnesses and Accept Testimony; and Frontier filed an Affidavit of Publication and Public Notice of Hearing.

On March 2, 2018, the Commission issued an Order Excusing Witnesses from Attending Hearing in this proceeding.

Pursuant to G.S. 138A-15(e) of the State Ethics Act, Commission members have a duty to avoid conflicts of interest and to determine in each docket whether they have any known conflict of interest. Let the record reflect that I do not have a known conflict of interest with respect to matters before the

Commission in this docket.

I now call upon counsel for the parties to announce their appearances for the record, beginning with Frontier.

MR. JEFFRIES: Thank you, Madam Chairman. My name is Jim Jeffries. I'm with the Law Firm of Moore & Van Allen and I represent Frontier Natural Gas Company.

COMMISSIONER MITCHELL: Public Staff.

MS. CULPEPPER: Good morning. Elizabeth Culpepper with the Public Staff appearing on behalf of the Using and Consuming Public.

COMMISSIONER MITCHELL: Thank you, Ms. Culpepper.

Before we conduct the public hearing portion of this proceeding, are there any preliminary matters that counsel are aware of that we need to address?

MS. CULPEPPER: No.

MR. JEFFRIES: No.

COMMISSIONER MITCHELL: Has the Public Staff identified any non-expert public witnesses who wish to testify this morning?

MS. CULPEPPER: No, there's none.

COMMISSIONER MITCHELL: Let me make certain that there are none. Is there anyone present in the room that would like to come forward and testify in this docket today as a public witness? If so, please identify yourself.

Okay. No response. And I'm seeing no one in the room identifying themself. So please let the record reflect that no one identified themselves as wishing to testify in this docket as a public witness.

So now we will move into the expert witness portion of this hearing. The case is now with Frontier.

MR. JEFFRIES: Thank you, Madam Chairman. As part of the Motion to Excuse Witnesses, the Public Staff and Frontier have agreed to waive cross examination and request that the Commission accept the prefiled testimony into the record as if given today. For Frontier, that testimony would consist of the direct prefiled testimony of Fred Steele, which as you indicated had been filed on December 1st, consisting of 24 pages, Schedules and Exhibits A through C, and then Mr. Steele's prefiled rebuttal testimony filed on March 1st consisting of three pages. And we would respectfully ask that that testimony and those exhibits be entered into the record by stipulation of the parties.

COMMISSIONER MITCHELL: So without objection, the prefiled joint (sic) direct testimony of Frontier's witness Fred A. Steele which was filed on December 1, 2017, will be copied into the record as if given orally from the stand word-for-word and admitted into evidence.

Madam Court Reporter, please note that Confidential Exhibits A and B shall remain confidential in the record.

And the exhibits filed with Witness Steele's direct testimony will be received into evidence and marked as prefiled. In addition, the prefiled rebuttal testimony of Frontier Witness Fred A. Steele will be copied into the record as if given orally from the stand word-for-word and admitted into evidence.

(WHEREUPON, Steele Schedules 1-4, 8, 10 and 11, and Steele Confidential Exhibits A and B, and Steele Exhibit C was marked for identification as prefiled and received into evidence.)

(WHEREUPON, the prefiled direct and rebuttal testimony of **FRED A.**

STEELE is copied into the record as if given orally from the stand.)

State of North Carolina

North Carolina Utilities Commission
Raleigh

Docket No. G-40, Sub 145

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION:

In the Matter of	)
	)
Application of Frontier Natural Gas	)
Company, LLC for Annual Review of	)
Gas Costs Pursuant to G.S. 62-133.4(c)	)
and Commission Rule R1-17(k)(6)	)

DIRECT TESTIMONY AND EXHIBITS

OF

FRED A. STEELE

December 1, 2017

Q. Please state your name, business address, by whom you are employed, and in what capacity.

A. My name is Fred Steele and my business address is 110 PGW Drive, Elkin North Carolina, North Carolina, 28621. I am employed by Frontier Natural Gas Company ("Frontier"), as President/General Manager.

Q. Mr. Steele, how long have you been associated with Frontier?

A. I began working with Frontier in March 2014.

Q. Mr. Steele, what are your current responsibilities with Frontier?

A. I am responsible for the management and oversight of all aspects of natural gas utility operations for Frontier. These responsibilities include the management and oversight of the gas supply department for Frontier. The gas supply department's specific responsibilities include planning and procurement of gas supply and pipeline capacity, nominations and scheduling related to natural gas transportation and storage services on interstate pipelines and Frontier's system, gas cost accounting, state and federal regulatory issues concerning supply and capacity, asset and risk management, and transportation administration.

Q. Mr. Steele, please summarize your educational and professional background.

A. I am a graduate of Ohio University with a degree in accounting. I am a licensed Certified Public Accountant in the State of Ohio. I began working in the oil and gas industry in 1975. Initially I worked as an accountant for an oil and gas exploration and development company. Building upon that experience, I then became the Controller of another oil and gas exploration and development company. Later, I formed and developed an accounting practice primarily serving oil and gas clients. Upon selling the practice in 1986, I became the Chief Financial Officer of an oil and gas exploration and development company and natural gas distribution company. I served in this capacity for ten years. I became the Chief Executive Officer of this company after ten years and then served in that position for an additional thirteen years. The company's primary focus was natural gas distribution, operating in five states. Upon sale of the company I worked as a consultant with clients in the energy industry for almost three years prior to accepting the position with Frontier in March 2014. I became the General Manager of Frontier on September 9, 2014. Over the years I have held various positions of management and oversight related to gas procurement, interstate pipeline and local distribution company scheduling, and preparation of gas accounting information.

Q. Please describe generally Frontier and its system.

A. Frontier subsidiary of (Gas Natural Inc.) headquartered in Elkin, North Carolina. The Frontier natural gas system is physically comprised of approximately 139 miles of transmission line with two Transco take off points located in Warren County and Rowan County. Frontier is engaged in the business of transporting and selling natural gas in North Carolina as a local distribution company, subject to regulation by the North Carolina Utilities Commission. Frontier has transmission and distribution lines that serve customers in Yadkin, Surry, Wilkes, Warren, Watauga, and Ashe Counties. Distribution pipeline construction and provisions of service to existing and additional customers is evaluated on an ongoing basis in all six franchised counties based on the economic feasibility of serving the customer.

Q. Please briefly describe Frontier and the composition of its market.

A. Frontier is a local distribution company primarily engaged in the purchase, transportation, distribution, and sale of natural gas to approximately 3,600 customers in and/or near Wilkesboro, North Wilkesboro, Elkin, Dobson, Mt. Airy, Yadkinville, Hays, Roaring River, Manson, Warrenton, Norlina, Boone, Jefferson, and West Jefferson.

Approximately 75% percent of Frontier's throughput during the review period was comprised of deliveries to industrial or large commercial customers that either purchased natural gas from Frontier or transported gas on Frontier's system. The majority of these customers were and are currently served under interruptible rate schedules. These large customers have the ability to use an alternative fuel other than natural gas (e.g., #2 fuel oil, or propane) and can make the switch to an alternative fuel when its price is less than natural gas. The remainder of Frontier's sales are to residential and small commercial customers served under firm rate schedules. Frontier's primary competition for residential and small commercial customers is electricity, propane, and fuel oil and varies according to geographic area.

Q. What is the purpose of your testimony in this proceeding?

A. North Carolina General Statute § 62-133.4 allows Frontier to track and recover from its customers the cost of natural gas supply and transportation and to adjust customer charges to reflect changes in those costs. Under subsection (c) of the statute, the Commission must conduct an annual review of Frontier's gas costs, comparing Frontier's prudently incurred costs with costs recovered from customers during a twelve month test period. To facilitate this review, Commission Rule R1-17(k)(6) requires Frontier to submit to the Commission, on or before December 1 of each year, certain information for the twelve month test period ended September 30. In addition to my testimony, Frontier is submitting schedules contained in the accompanying exhibits for the purpose of providing the Commission with the data necessary to true-up Frontier's gas costs during the review period. This is Frontier's 18th proceeding under Commission Rule R1-17(k)(6) since we began operations.

Q. Please describe Frontier's gas supply policy.

A. Frontier's system and gas supply procurement policy are designed to serve firm customers reliability on a peak day. Frontier's gas supply policy continues to be best described as a best evaluated cost supply strategy. This gas supply strategy is based upon several criteria: operational flexibility, supply security/ creditworthiness, reliability of supply, the cost of the gas, and quality of supplier customer service. The foremost criterion for Frontier is the security of gas supply, which refers to the assurance that the supply of gas will be available when needed. This criterion is required for Frontier's firm sales customers, who have no alternate fuel source, due to the daily changes in Frontier's supply requirements caused by the unpredictable nature of weather, and the production levels/operating schedules of Frontier's industrial customers, combined with their abilities to switch to alternate fuels, and the growth of customers during the test period. While Frontier's gas supply agreements have different purchase commitments and swing capabilities (i.e., ability to adjust purchase volumes within the contract volume), the gas supply portfolio as a whole must be capable of handling the seasonal, monthly, daily and hourly changes in Frontier's market requirements. Frontier is still in a growth mode and the variation in bundled load and the need to cover marketer imbalances is important. Frontier understands the necessity of having security of supply to provide reliable, dependable natural gas service and has demonstrated its ability to do so. Frontier's supply strategy and its contracts with its suppliers implementing this strategy have allowed Frontier to accomplish this objective. The other primary criterion is the cost of gas. Frontier is committed to acquiring the most cost effective supplies of natural gas available for its customers while maintaining the necessary operational flexibility, security and reliability to serve their needs.

Q. What are the greatest challenges in the development and implementation of Frontier's gas supply strategy?

A. A significant challenge is to accurately forecast Frontier's gas supply needs. There are several factors that make this difficult. First, Frontier is a growing LDC. The number of customers increased from 3,343 on October 31, 2016 to 3,622 as of October 31, 2017, an increase of approximately 8.3%. Second, Frontier continues to add new customers with undocumented natural gas needs and winter consumption patterns. It is extremely difficult to forecast winter peak load requirements for new industrial/commercial customers that Frontier did not serve the previous winter. Third, most of Frontier's throughput serves large industrial customers, some of whom have alternative fuel supplies. Fourth, large industrial/commercial customers can change procurement strategies and secure their commodity needs from other sources. Fifth, Frontier has a disparity in climate in the territory that is accentuated by the small size of our company, therefore making it difficult to project the load. Frontier has experienced substantial climate variations between the mountains in Boone and the valleys around Yadkinville. We also have a significant residential load in Warren County, with usage characteristics, based on temperature that can vary from those in Surry or Yadkin County. Finally, and perhaps most importantly, is unpredictable, extreme weather patterns. A number of our new customers are poultry hatcheries and grow-out houses, which require fairly constant temperatures for their chickens to survive and thrive, most of which are not well insulated, and many of which do not have alternative fuels. Many of these poultry operations are family-owned and highly leveraged (i.e. the families rely upon the revenue from the sale of fully-grown chickens to meat processors to pay off their loans procured to cover the expenses to raise the chickens and have enough left over to live off of). Extremely cold ambient temperatures greatly increase the natural gas demand for heating these facilities. All of these factors create additional challenges in predicting needs.

Q. Please describe Frontier's interstate capacity.

A. Although it has relied on purchases of bundled supply during most of its history, Frontier has now purchased 8,613 DTH per day of firm capacity on the Transco interstate pipeline. The quantities purchased were based on availability, cost, and a projected need at that time. Frontier has already outgrown this initial purchased capacity and has had to buy supplemental swing and peaking contracts to offset the additional need. This additional supply is purchased pursuant to an Asset Management Agreement with UGI Energy Services, as described in greater detail below.

Q. Has Frontier bid on any additional interstate pipeline capacity during this past year?

A. Yes. Frontier submitted a bid for additional capacity at the maximum rate possible for 2,663 DTH's on August 18, 2016 for a ninety-two year term but was not awarded the bid for this capacity.

Q. What efforts has Frontier undertaken in the past year to purchase additional interstate pipeline capacity?

A. In an effort to increase its firm capacity on Transco over the last three years Frontier has submitted the following bids.

1. Frontier submitted a bid at the maximum rate possible for 1,656 DTH's on June 10, 2014 for a twenty year term but was not awarded that capacity.
2. Frontier submitted a bid at the maximum rate possible for 141 DTH's on September 26, 2014 for a forty-five year term and was awarded that capacity.

3. Frontier submitted a bid at the maximum rate possible for 2,264 DTH's on October 1, 2014 for a forty-five year term but was not awarded that capacity.
4. Frontier submitted a bid at the maximum rate possible for 500 DTH's on November 15, 2014 for a fifty-one year term but was not awarded that capacity.
5. Frontier submitted a bid at the maximum rate possible for 2,337 DTH's on August 19, 2015 for a seventy-eight year term and was awarded the bid.
6. Frontier submitted a bid at the maximum rate possible for 2,663 DTH's on August 18, 2016 for a eighty-seven year term and was awarded the bid.

Additionally Frontier has sought to partner with other gas companies or municipals attempting to purchase capacity on the Transco.

Q. Has there been any significant change to Frontier's gas supply strategy during the test year?

A. No. Frontier is committed to achieving price stability, at a reasonable level, while continuing to provide safe, and reliable natural gas service for the consuming public. Frontier reviewed and implemented policies related to gas planning, system operations and procurement in 2014. Items addressed were Design Day Demand Requirements, Gas Procurement, including Capacity Planning and Resources, and Commodity Planning and Resources, Curtailment Policy and Technical Training. Frontier retained Kan Huston as an independent, unbiased third party consultant which was approved by the Public Staff, to review, critique, and provide comments on these policies. A copy of the Kan Huston 2014 report is attached as Exhibit C to this testimony. This report discusses among other things, peak day forecasts and the determination of contract demand policy. Frontier incorporated the recommendations of Kan Huston and began implementing these policies before September 15, 2014 in anticipation of the upcoming winter season and have continued the implementation of these policies throughout the current test year. We also established appropriate internal controls between the Controller/accounting functions and Frontier's gas purchasing agent and designated a specific, qualified employee responsible for the implementation of these policies. Drew Waravdekar, an engineer, has been designated as the qualified employee.

Q. Based upon the development of new policies, and the review and evaluation of Frontier's policies, what is Frontier's current practice?

A. Frontier currently contracts utilizes UGI Energy Services, LLC ("UGI") to centralize purchasing and reliability of gas deliveries under a full requirements contract, but under more rigorous parameters and policies, as outlined in the Kan Huston report. It is Frontier's policy to evaluate this and different strategies and tactics to promote price stability and cost efficient purchasing in the Annual Plan or as opportunities arise.

The core of Frontier's current strategy is to obtain reliability and price stability by fixing components of the gas cost, including fixing commodity costs and/or transportation costs of the commodity. Frontier has a three-part pricing strategy in gas purchasing: 1) hedging, 2) first of the month, 3) daily. Depending on the current pricing compared to historical, Frontier will adjust the weights of each component and incorporate the best pricing methodology to obtain the optimum opportunity in savings and price stability. Frontier purchases gas in Summer and Winter strips and evaluates their hedging or fixed pricing opportunity based on these individually and as a whole. The goal of this weighted average approach, described below, is to take advantage of any market movements in pricing that may occur as a proactive measure and/or savings opportunity.

To stabilize Frontier gas cost and to obtain pricing opportunities, the strategy is to buy gas through a combination of hedging, first of the month, and daily purchases. This strategy, depending on market conditions, is approached through three methodologies: 1) Conservative, 2) Moderate, and 3) Aggressive:

1. Conservative: Hedge 0-25% of forecasted volumes when pricing is +/- 10% historical pricing levels for the strip period or for the month.
2. Moderate: Hedge 25-40% of forecasted volumes when pricing is 25% less than historical levels.
3. Aggressive: Hedge 40-75% of forecasted volumes when pricing is 50% less than historical levels.

Q. Does Frontier periodically evaluate suppliers in the marketplace to ensure the most reasonable and prudent terms, conditions and price for its ratepayers?

A. Yes, in June 2014, Frontier issued requests for proposals to four potential natural gas suppliers, including Frontier's supplier at that time. Only two companies responded with proposals for Frontier's consideration. Frontier evaluated the proposals using the criteria of our gas supply policy: flexibility, security/creditworthiness, price, performance/reliability, and quality of supplier customer service. In October 2014, Frontier selected BP Energy Company ("BP") to provide our gas supply needs for the next seventeen months, based on their ability to satisfy these criteria. BP began work as Frontier's new Asset Manager starting November 1, 2014. In January 2016 Frontier issued requests for proposals to four potential natural gas suppliers, including Frontier's supplier at that time. Three companies responded with proposals for Frontier's consideration. Frontier evaluated the proposals using the criteria of our gas supply policy: flexibility, security/creditworthiness, price, performance/reliability, and quality of supplier customer service. In March 2016, Frontier selected UGI Energy Services, LLC to provide our gas supply needs for the next twelve months, based on their ability to satisfy these criteria. UGI began work as Frontier's new Asset Manager starting April 1, 2016. On March 31, 2017 Frontier exercised an option for the renewal of its contract with UGI until March 31, 2020.

Q. Under this approach, does Frontier have the flexibility to meet its market requirements?

A. Yes. The gas supply contracts that Frontier has negotiated, including the current one with UGI, have the flexibility and reliability to meet its market requirements in a secure and cost effective manner. Frontier evaluates and plans to meet all short- and long-term requirements on an ongoing basis.

Q. What actions have been taken by Frontier to accomplish its stated purchasing policy?

A. Frontier has taken the following steps to keep its gas costs as low as reasonably practical while accomplishing its stated policies of maintaining security of supply and delivery flexibility:

(1) Frontier has continued to work with its industrial customers to facilitate the transportation of customer-owned gas. Frontier's transportation service allows these customers to manage their energy supply in a way that ensures that natural gas remains as competitive as possible with alternative fuels and also maintains throughput on Frontier's system. This also enables Frontier to focus more on accurately predicting and meeting demand/capacity for its bundled full service customers.

(2) Frontier routinely communicates directly with customers, numerous supply sources, and other industry participants, and actively researches and monitors the industry and gas markets by using a variety of sources, including industry contacts, consultants, industry trade periodicals and the internet.

(3) Frontier has internal discussions when necessary among various senior level personnel concerning gas supply policy and major purchasing decisions.

(4) Frontier evaluates various other capacity and supply options.

(5) Frontier's asset management agreements ("AMA") during the review period with UGI Energy Services allowed Frontier to maximize the capabilities of the capacity purchased and manage the cost in the most effective manner. Frontier continues to adjust its monthly Maximum Daily Quantity ("MDQ") and carefully evaluates forecasted loads prior to each month and makes prudent adjustments to its MDQ.

(6) Frontier's AMA with UGI provides a high degree of flexibility.

Q. Did Frontier investigate hedging during the test year and, if so, what were the findings and conclusions?

A. Frontier continually monitors the NYMEX natural gas commodity market and associated hedging developments, trends, activity and costs. Frontier did not engage in hedging activity during the current review period of October 2016 to September 2017. Additionally, Frontier evaluated a peak day proposal from UGI.

Q. Did Frontier mitigate the costs of extra demand capacity?

A. Currently, Frontier has a daily reservation capacity of 8,613 DTH, with the successful bid on 2,663 DTH in August of 2016 which became effective in January 2017. Based on winter projections and historical data, incremental demand capacity is required to cover the peaking demand during November through March. For the upcoming winter season Frontier will utilize UGI additional daily capacity for the months of November, December, January, February and March.

As for any cost mitigation related to the extra demand capacity, value is captured through the AMA structure with UGI.

Q. Does Frontier have plans to obtain any additional pipeline capacity in the future?

A. Frontier will evaluate the need to obtain additional capacity upon the Transco line as it becomes available in relationship to its system growth.

Q. Did Frontier have sufficient daily capacity reserved during the months of January and February 2017, during the test period?

A. Yes, but Frontier did buy additional natural gas and capacity on the spot market to meet their customers' demand in November, January and February. While those demands were minimal, we believed the purchases were appropriate, in light of the needs of our customers, and in order to ensure service reliability. We were particularly cognizant of the potential impact to our poultry grow-out customers.

Q. What has been Frontier's progress toward eliminating its uncollected deferred account balance?

A. Frontier strategically tries to minimize adjustments in pricing. However, we had to institute an increase in our benchmark city gate delivered cost on February 1, 2017 and a decrease August 1, 2017. We anticipate that the current balance of $262,677 will be moving back toward $0.00 over the winter months.

Q. Did Frontier follow the gas cost accounting procedures prescribed by Rule R1-17(k) for the year ended September 30, 2017?

A. Yes. All accounting was done in accordance with Sections (4) and (5) of Rule R1-17(k) as applied to Frontier in previous Commission prudency review orders. In following Section (5)(c) of the Rule, Frontier is responsible for reporting gas costs and deferred account activity to the Commission and the Public Staff on a monthly basis.

Q. What schedules have you caused to be prepared?

A. The following schedules were prepared under my supervision and are attached to this testimony:

Schedule 1 - Summary of Cost of Gas Expense

Schedule 2 - Summary of Demand and Storage Charges

Schedule 3 - Summary of Commodity Gas Costs

Schedule 4 - Summary of Other cost of Gas Charges (Credits)

Schedule 8 – Summary of Deferred Account Activity

Schedule 10 - Summary of Gas Supply

Schedule 11 – Summary of Natural Gas Hedge Transactions

Q. What activity occurred in the deferred account during the twelve months ended September 30, 2017?

The activity can be summarized as follows:

Beginning balance, October 1, 2016	$	(7,898.76)
Commodity Cost vs Collections	$	175,683.54
Accrued interest	$	16,090.99
Transport Balancing	$	(26,598.42)
Adjustments	$	105,399.43

Ending balance, September 30, 2017 $ 262,676.78

Q. The attached schedules show the gas costs incurred by Frontier and billed to customers during the period October 1, 2016 through September 30, 2017. In your opinion, were all these gas costs prudently incurred?

A. Yes. All of these gas costs were incurred under Frontier's best evaluated cost supply strategy and are the result of reasonable business judgments considering the conditions and information available at the time the gas purchasing decisions were made.

Q. In reviewing the monthly schedules that have been filed throughout the current review period and the attached annual Prudency Review Schedules do you believe that there are any additional adjustments that may be required in the Deferred Account in order for Frontier to recover all of its natural gas costs incurred as of September 30, 2017.

A. Yes. Frontier has included an adjustment of $104,724 which it believes is required in order to match its tariffs which state that Frontier is to prorate usage between months and bill its customers based upon the appropriate benchmark cost that matches the actual tariff price billed to the customer. Frontier and the Public Staff have had discussions as it relates to this adjustment since it first became evident with the rate change of February 1, 2017. Frontier will continue to work with the Public Staff toward an amicable resolution of the adjustment.

Q. Please describe any changes in the Company's customer mix or customer market profiles that it forecasts for the next ten (10) years and explain how the changes will impact the Company's gas supply transportation and storage requirements

A. Frontier continues to focus on expanding its system to new customers. The 6" and 10" Steel Transmission (backbone) pipeline system for the Company's franchised area was completed in 2002. Significant PE pipeline construction has occurred since then throughout Frontier's franchised area and will continue wherever economically feasible to extend natural gas service to additional customers. Frontier's market mix will also continue to evolve and change as it matures. Several of Frontier's larger customers have transportation-only service. While service switching has stabilized (because of the relatively low cost of natural gas), fuel switching is still a potential risk if natural gas prices increase relative to alternative fuels. During the test period, natural gas enjoyed a more competitive pricing than alternative fuels.

Over the next five years, the annual forecasted growth is approximately 10.0% annually. Frontier is expecting this rate of growth to remain at this level over the next five years, with an increased focus on residential and small commercial customers. Sales loads are gradually increasing as more people have access to natural gas due to system expansion. Infill customers are slowly converting as current appliances need to be replaced and they become more aware of the benefits and lower prices of natural gas.

Frontier intends to meet its gas supply needs through its current capacity on Transco, and by acquiring additional capacity as it becomes available at reasonable terms, and by buying from wholesale suppliers utilizing an AMA with a third-party wholesale supplier, as needed. Frontier has determined that its current level of purchased capacity is not sufficient for its future, long-term needs -- based on the past historical needs during the winter season and the projected load growth in the future. To supplement Frontier's needs, Frontier purchased an additional 2,337 DTHs of capacity, effective January 1, 2016, and 2,663 DTHs to become effective on January 14, 2017. As Frontier continues to grow, it will be looking for incremental pipeline capacity, when available, on Transco. In addition, Frontier will continue to evaluate storage opportunities as they arise. Frontier continues to bid on additional pipeline capacity as opportunities present themselves on the Transco system. Frontier evaluates cooperative participation with other companies or municipalities when bidding on the additional capacity, and it plans to meet with other natural gas producers who have purchased capacity on the Transco system – all in an effort to increase its available capacity to accommodate its anticipated growth.

Q. Please identify the rate schedules and special contracts that the Company uses to determine its peak day demand requirements for planning purposes. Please explain the rationale and basis for each rate schedule or special contract included in the determination of peak day demand requirements.

A. For the peak day demand in February 2015 and the next five (5) winter seasons:

Peak Demand

DTH/Day*	2015	2018	2019	2020	2021	2022
System Forecast	11,845	14104	15367	16857	18495	20297
Rate 151 & 161	474	474	474	474	474	474
Rate 121	1,658	1974	2172	2389	2628	2890
Rate 111 & 131	8,528	10154	11170	12287	13516	14867
Rate 101	1,185	1411	1552	1707	1878	2066
Total	11,845	14014	15368	16857	18495	20297

- Review Period (February 2015)

Note: Frontier's peak demand can be impacted by imbalances from Transportation Customers anywhere between +/- 10 to 20%. The numbers above do not include the imbalance potential.

CONFIDENTIAL Exhibit A, filed concurrently herewith, shows the projected capacity growth requirements for both special contracts and by rate schedules.

Q. Please provide the base load demand requirements estimated for the review period and forecasted for each of the next five years. Please provide the one-day design peak demand requirements used by the Company for planning purposes for the review period and forecasted for each of the next five winter seasons. The peak demand requirement amounts should set forth the estimated demand for each rate schedule or priority with peak day demand. All assumptions, such as heating degree days, dekatherms per heating degree day, customer growth rates and supporting calculations used to determine the peak day requirement amounts should be provided.

A. CONFIDENTIAL Exhibit B, report on Design Day Study prepared by Dr. Ronald H. Brown, Ph.D. utilizing the Marquette University GasDay, filed concurrently herewith, shows the projected capacity growth requirements for the 2017-2018 winter.[1] CONFIDENITAL Exhibit A prepared by Frontier shows the projected capacity growth requirements for the next five years.

Q. Please explain how the Company determines which type of resource should be acquired or developed for meeting the Company's deliverability needs, and describe the factors evaluated in deciding whether the Company should acquire a storage service, or develop additional on-system storage deliverability.

A. Frontier has historically relied on its gas supplier to provide the commodity and the capacity requirements to deliver its needs. This was an appropriate approach in the past while Frontier was smaller and growing and its mix of customers and load was less predictable. Frontier currently has long-term permanent capacity, but not enough to cover the winter peak day needs. Frontier continues to acquire its own capacity on the Transco System in an effort to reduce reliance upon a third-party gas supplier for its capacity needs. Frontier has addressed the shortage of capacity by buying additional capacity from its wholesale supply contractors, UGI, and on the market.

Frontier acquired a long-term commitment for pipeline capacity to handle the projected gas supply needs for the review period. Frontier's need for additional capacity continues to grow. Over the next five years Frontier is projecting that this need for capacity will continue to increase based on the growth projection. When Frontier initially purchased capacity, the market had available

[1] This report is being also being provided in conformance with the requirements of ordering paragraph 6 of the Commission's June 13, 2017 Order on Annual Review of Gas Costs in Docket No. G-40, Sub 135.

incremental capacity. This availability, however, does not always align with Frontier's needs to buy in the desired increments that strategically correspond with Company growth and meet forecasted daily peak day requirements. To more efficiently manage this process, Frontier entered into an AMA to minimize potential stranded gas costs, lower the demand fees, and enable it to meet the supply needs of its growing customer base. During the review period, Frontier's total bundled gas sales were approximately 1,012,815 DTHs, which represents a 0.6% decrease. Frontier did not acquire any storage service, or on-system storage capability.

Q. Please describe how the company determines the amount of pipeline capacity that should be acquired for (a) the whole year, (b) the full winter season and (c) less than the full winter season. Also, please describe the factors evaluated in determining the appropriate amount and mix of service period options.

A. Please see CONFIDENTIAL Exhibit A filed concurrently herewith previously referenced above.

Frontier evaluates the need for transportation and storage annually based on the previous season's results and the historical and forecasted change in growth. This growth and the cost to obtain transportation and storage is reviewed to determine the most cost-effective and reliable way to deliver and manage gas. UGI assisted in this evaluation and helped determine an overall total cost for delivering gas during the test period. Some of the factors Frontier considered include peak-day flow requirements, customer mix, future services

Frontier wants to offer, system capabilities, storage availability, and Gas Supplier capabilities, and potential price volatility.

Frontier continues to refine these efforts with the assistance of UGI, and has been very pleased with their level of service and expertise.

Frontier determines the amount of capacity required by evaluating the current bundled volumes delivered on a monthly and annual basis, the projected Heating Degree Days, the historical and projected rate of growth, and the peaking needs. In addition, Frontier covers any marketer imbalances and therefore must account for any potential capacity requirements to cover variances in MDQ of +/-10-20%. The final maximum MDQ capacity requirements are based on consideration of all of these.

Frontier has purchased capacity on Transco, and continues to look for opportunities to purchase more.

Q. Please describe each new capacity and storage opportunity that the Company is contemplating entering into during the next five year period.

A. Frontier reviewed the results of the 2013-2014 winter season. This review resulted in entering into a new seventeen-month Asset Management Agreement with BP effective on November 1, 2014 through March 2016. Frontier entered into a twelve-month Asset Management Agreement with UGI effective April 1, 2016 and a thirty-six month Asset Management Agreement with UGI effective April 1, 2017.

During the review period, Frontier utilized its current permanent pipeline capacity on Transco. Frontier has determined that this capacity is not sufficient for our future needs -- based on the past historical needs during the winter season and the projected load growth in the future. As Frontier continues to grow, it will be looking for incremental pipeline capacity on Transco to ensure long-term system reliability. In addition, Frontier will continue to evaluate storage opportunities as they arise. Also, please see previous testimony which summarizes Frontier's efforts to purchase capacity over the past year.

Q. Please provide a computation of the reserve or excess capacity estimated for the review period and forecasted for each of the next five winter seasons.

A. Frontier does not have excess permanent capacity and has very little reserve permanent capacity except during the summer. Frontier has a shortage of permanent capacity during the winter season, which was managed by a contract with UGI to purchase the required capacity during the review period, as discussed previously and which is being addressed long-term by incremental purchases from UGI. CONFIDENTIAL Exhibit A shows the growth and computation of peak day forecasted and capacity requirements for the next five years.

Frontier believed in the past that utilizing these tools has been more cost effective, over the long run, and resulted in lower costs to its customers than if it had purchased excess permanent capacity on Transco to meet its full requirements. It will continue to assess opportunities to purchase additional capacity on Transco as opportunities arise, as discussed above.

Q. Please describe any significant storage, transmission, and distribution upgrades required for the Company to fulfill its peak day requirements during the next five years.

A. As discussed above in greater detail, the issue is available capacity on Transco, not infrastructure. At this time, Frontier's system has sufficient infrastructure to handle forecasted gas supply needs for the next five years. Frontier will continue to assess its needs on an ongoing basis.

Q. What action does Frontier request the Commission to take regarding these deferred accounts?

A. Frontier requests that the Commission approve the September 30, 2017 balances, as adjusted herein, and find that the costs incurred by Frontier's gas purchases were prudent during the relevant twelve-month period.

Q. Does that conclude your testimony?

A. Yes, at this time.

State of North Carolina

North Carolina Utilities Commission

Docket No. G-40, Sub 145

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION:

In the Matter of:

Application of Frontier Natural Gas Company, LLC for Annual Review of Gas Costs Pursuant to G.S. 62-133.4(c) and Commission Rule R1-17(k)(6)

REBUTTAL TESTIMONY

of

FRED A. STEELE

March 1, 2018

Q. Please state your name, occupation, and business address.

A. My name is Fred Steele and my business address is 110 PGW Drive, Elkin North Carolina, North Carolina, 28621. I am employed by Frontier Natural Gas Company ("Frontier" or the "Company"), as President/General Manager.

Q. Have you previously testified in this proceeding?

A. Yes, I prefiled testimony in this proceeding on December 1, 2017.

Q. What is the purpose of your rebuttal testimony in this proceeding?

A. The purpose of my rebuttal testimony is to respond to certain matters raised in the joint direct testimony of Public Staff witnesses Jan A. Larsen, Shawn L. Dorgan, and Julie G. Perry in this proceeding.

Q. Which matters set out in the Public Staff testimony do you want to discuss?

A. I specifically want to acknowledge that after reviewing the Public Staff's testimony, and engaging in several follow-up conversations with the Public Staff, Frontier does not have any ongoing objections or opposition to the matters set forth in that testimony, as slightly revised through further conversations with the Public Staff. Specifically, we agree with the adjustment to our benchmark proration calculation offered by Ms. Perry in her testimony which changed the proration credit to the Company from $104,724 to $98,159. After further discussions with the Public Staff, we also agree with the Public Staff proposal to adjust the interest rate on Frontier's gas cost deferred account but have reached agreement with the Public Staff to slightly modify their recommendation of 6.5% to an interest rate of 6.6% to be effective January 1, 2018. Frontier is authorized to state that the Public Staff is in agreement with an interest rate of

6.6% on the deferred account. Finally, we agree with Mr. Dorgan's recalculation of the end-of-period balance in Frontier's gas cost deferred account of $251,005.

Q. Do you have any other comments on the Public Staff's testimony?

A. I would note that the Public Staff found Frontier's gas purchasing practices and hedging practices to be prudent and that with the exception of the proration adjustment noted above (which we now agree with), the Public Staff found our accounting for gas costs during the review period to be accurate. The Public Staff did identify some concerns about documentation of our decisions as to whether or not to engage in financial hedging and inconsistencies between our monthly gas cost reports and other annual statements. We understand their concerns on these points and have committed to take them into consideration as we move forward.

Q. Are there any active matters in dispute between the Company and the Public Staff in this docket?

A. Not to my knowledge.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

COMMISSIONER MITCHELL: Ms. Culpepper, would the Public Staff like to make a motion?

MS. CULPEPPER: Yes, ma'am. I move that the prefiled joint testimony of Jan A. Larsen, Shawn L. Dorgan and Julie G. Perry filed on February 22, 2018, and revised on February 27, 2018, consisting of 25 pages be copied into the record as if given orally from the stand, and that the three exhibits and three appendices attached to the prefiled testimony be identified as marked when filed and entered into evidence.

COMMISSIONER MITCHELL: Without objection, the Public Staff witnesses' prefiled joint testimony of Jan A. Larsen, Shawn L. Dorgan and Julie G. Perry, along with the revisions filed on February 22, 2018, as well as Appendices A, B and C to that testimony, will be copied into the record as if given from the stand word-for-word and admitted into evidence, and those Appendices will be marked as prefiled.

(WHEREUPON, the prefiled joint direct testimony of **JAN A. LARSEN**, **SHAWN L. DORGAN** and **JULIE G. PERRY** is copied into the record as if given orally from the stand.)

FRONTIER NATURAL GAS COMPANY

DOCKET NO. G-40, SUB 145

JOINT TESTIMONY OF

JAN A. LARSEN, SHAWN L. DORGAN, AND JULIE G. PERRY

ON BEHALF OF

THE PUBLIC STAFF – NORTH CAROLINA UTILITIES COMMISSION

February 22, 2018

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

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

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

A. The purpose of my testimony is (1) to evaluate the prudence of the natural gas purchases made by Frontier Natural Gas Company (Frontier or Company), (2) to evaluate Frontier's projected peak day demand, and (3) to discuss my recommendation regarding any temporary rate increments or decrements.

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

A. My name is Shawn L. Dorgan, and my business address is 430 North Salisbury Street, Raleigh, North Carolina. I am a Staff Accountant in the Accounting Division of the Public Staff. My qualifications and experience are provided in Appendix B.

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

A. The purpose of my testimony is (1) to present the results of my review of the gas cost information filed by Frontier in accordance with G.S. 62-133.4(c) and Commission Rule R1-17(k)(6), (2) to provide my conclusions regarding whether the gas costs incurred by Frontier during the 12-month review period ended September 30, 2017, were properly accounted for, and (3) to discuss any changes to the deferred account reporting during the review period.

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

A. My name is Julie G. Perry, and my business address is 430 North Salisbury Street, Raleigh, North Carolina. I am the Accounting Manager of the Natural Gas & Transportation Section in the Accounting Division of the Public Staff. My qualifications and experience are provided in Appendix C.

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

A. The purpose of my testimony is to discuss my investigation and conclusions regarding (1) the prudence of Frontier's decision not to hedge during the review period, (2) the proration adjustment reflected by Frontier, (3) changes to Frontier's deferred account interest rate, and (4) Frontier's annual review reporting.

Q. PLEASE EXPLAIN HOW THE PUBLIC STAFF CONDUCTED ITS REVIEW.

A. We reviewed the testimony and exhibits of the Company's witness, the Company's monthly Deferred Gas Cost Account reports, monthly financial and operating reports, the gas supply and pipeline transportation contracts, and the Company's responses to Public Staff data requests. The responses to the Public Staff data requests contained information related to Frontier's gas purchasing philosophies, customer requirements, and gas portfolio mixes.

Q. MR. LARSEN, WHAT IS THE RESULT OF YOUR EVALUATION OF FRONTIER'S GAS COSTS?

A. Based on the Public Staff's investigation and its review of the data in this docket, and the adjustment to Frontier's deferred gas cost account discussed later in testimony, I believe that Frontier's gas costs were prudently incurred.

CUSTOMER GROWTH

Q. **HOW HAVE FRONTIER'S CUSTOMERS AND THROUGHPUT CHANGED SINCE THE COMPANY'S LAST ANNUAL REVIEW OF GAS COSTS PROCEEDING?**

A. The table below reflects Frontier's customer growth rate of 7.48% during the current review period, which is approximately four times the growth rate of legacy local distribution companies (LDCs) in North Carolina. There was a slight decrease in both Frontier's sales and transportation volumes (expressed in dekatherms or dts) from the prior review period. Since Frontier's winter throughput is largely dependent on weather due to space heating load, the volume change is correspondingly affected by a change in Heating Degree Days (HDDs) as compared to prior periods.

	2016 Review	2017 Review	Change
Number of Customers (at September 30)	3,343	3,593	7.48%
Sales Volume (dts)	1,016,558	1,012,584	-0.39%
Transportation Volume (dts)	2,843,234	2,828,955	-0.50%
Total Sales & Transportation Volumes (dts)	3,859,792	3,841,539	-0.47%

Q. MR. LARSEN, DID FRONTIER AQUIRE ADDITIONAL PIPELINE CAPACITY DURING THE REVIEW PERIOD?

A. Yes. Frontier acquired an additional 2,663 dts per day of Transcontinental Gas Pipeline Company, LLC (Transco) year round pipeline capacity effective January 2017, which results in a total pipeline capacity for Frontier of 8,613 dts per day.

Frontier states that it will continue to seek incremental pipeline capacity and evaluate storage opportunities in order to serve its customers. Frontier indicated in a data request response that it reached out to gas companies and municipalities in order to partner to obtain additional capacity on Transco. Frontier also indicated that it did not encounter any storage opportunities.

Q. MR. DORGAN, HAS THE COMPANY PROPERLY ACCOUNTED FOR ITS GAS COSTS DURING THE REVIEW PERIOD?

A. Yes, except for the deferred account adjustment and the reporting revisions to the Company's filed annual review schedules that will be discussed later in testimony.

Q. MR. LARSEN, WHAT OTHER ITEMS DID THE NATURAL GAS DIVISION REVIEW?

A. Even though the scope of Commission Rule R1-17(k) is limited to a historical review period, the Public Staff's Natural Gas Division also considers other information received pursuant to the data requests in order to anticipate the Company's requirements for future needs, including design day estimates, forecasted gas supply needs, projection of capacity additions and supply changes, and customer load profile changes.

ACCOUNTING FOR AND ANALYSIS OF GAS COSTS

Q. **MR. DORGAN, HOW DOES THE ACCOUNTING DIVISION GO ABOUT CONDUCTING ITS REVIEW OF THE COMPANY'S ACCOUNTING FOR GAS COSTS?**

A. The Public Staff's Accounting Division reviews the Company's monthly Deferred Gas Cost Account reports together with all supporting documentation, monthly financial and operating reports, as well as the Company's gas supply and transportation contracts. In addition, I have reviewed the schedules attached to Company witness Steele's testimony, and the Company's responses to the all of the Public Staff data requests in this proceeding.

Each month I review the Deferred Gas Cost Account reports filed by the Company for accuracy and reasonableness, and perform certain review procedures on the calculations, including the following:

(1) **Gas Cost True-Up** – The actual commodity and demand costs are verified, calculations and data supporting gas cost collections are checked, invoices are reviewed, and the Company's overall calculations are checked for mathematical accuracy.

(2) **Transportation Customer Balancing True-Up** – The monthly Cash-Out Report for each marketer is reviewed and all calculations for cash-out amounts are verified.

(3) **Interest Accrual** – Interest accrual calculations on the outstanding Deferred Gas Cost Account balances are verified.

(4) **Hedging Transactions** – The cost of hedging transactions are traced to the supporting documentation, and are verified for mathematical accuracy.

(5) **Temporary Increments and/or Decrements** – All calculations and supporting data regarding collections from and/or refunds to customers that are recorded in the Deferred Gas Cost Account are verified, and supporting data and schedules are reviewed.

(6) **Supplier Refunds** – In Docket No. G-100, Sub 57, the Commission held that, unless it orders refunds to be handled differently, supplier refunds should be flowed through to ratepayers through a company's deferred account. I reviewed documentation received by the Company from its suppliers to ensure that the amount received by the Company is flowed through to ratepayers.

Q. **MR. DORGAN, HOW DO THE COMPANY'S FILED GAS COSTS FOR THE CURRENT REVIEW PERIOD COMPARE WITH THOSE FOR THE PRIOR REVIEW PERIOD?**

A. Frontier's total gas costs for the current review period per the Company's monthly deferred account reports filed with the Commission were $4,641,053, as compared to the prior year of $5,242,868. In the current review period, in order to agree the cost of gas to the GS-1 Reports filed with the Commission, we reflected the offsetting gas cost true-up entries of $149,768 as well as entries that are recorded in other cost of gas but do not impact the Company's deferred account of $58,454, resulting in a total cost of gas for the current review period of $4,699,507. The components of gas costs incurred for the two periods are as follows:

Frontier Natural Gas Company

Docket No. G-40, Sub 145

Comparison of Gas Costs

Line		12 Months Ended Sept. 30, 2017	12 Months Ended Sept. 30, 2016 [1]	Increase (Decrease)	% Change
	Pipeline Charges				
1	Transco FT	$1,090,560	$738,694	$351,866	47.63%
2	Other	-	-	-	
3	**Total Pipeline Charges**	**$1,090,560**	**$738,694**	**$351,866**	**47.63%**
	Gas Supply Costs				
4	Baseload Purchases	$3,395,754	$1,773,314	$1,622,440	91.49%
5	Delivered Purchases	305,541	212,145	93,396	44.02%
6	Hedge Purchases	-	1,818,200	(1,818,200)	-100.00%
7	Other	(1,034)	184,108	(185,142)	-100.56%
8	**Total Gas Supply Costs**	**$3,700,261**	**$3,987,767**	**($287,506)**	**-7.21%**
	Other Gas Costs				
9	True-up Entries per Monthly				
10	Deferred Account Filings	$(149,768)	$516,407	$(666,175)	-129.00%
11	Additional Non Deferred				
	Account Related Gas Costs	58,454	-	58,454	100.00%
12	**Total Other Gas Costs**	**$(91,314)**	**$516,407**	**($607,721)**	**-117.68%**
13	**Total Gas Costs**	**$4,699,507** [2]	**$5,242,868**	**($543,361)**	**-10.36%**
14	**Gas Supply for Delivery (dts)**	**1,065,672**	**1,112,904**	**(47,232)**	**-4.24%**
15	**Total Gas Supply Cost per Dt**	**$4.4099**	**$4.7110**	**($0.3011)**	**-6.39%**

Notes:

[1] - Includes reclassified gas costs per Public Staff analysis of the Company's monthly deferred account reports.

[2] - Ties to Income Statement Cost of Gas Sold per Company monthly filings with both the Public Staff and the Commission.

The increase in the **Transco Firm Transportation** is due to the addition of 2,663 dts per day of year round pipeline capacity effective January 2017.

The **Baseload Purchases** increased due to the fact that there were no physical hedging purchases during the review period as compared to the prior period.

The increase in the **Delivered / Daily Purchases** is due to a reduction of physical hedging purchases as compared to the prior year.

Other **Gas Supply Costs** decreased due to a prior period adjustment to reclassify pipeline charges to gas supply charges.

The decrease in the **Hedging Purchases** is due to the fact that Frontier did not hedge during the current review period.

Gas Supply Costs decreased by $287,506, due to a decrease in the commodity cost of gas, as well as a decrease in volumes purchased during the current review period as compared with the prior year. As indicated in the chart above, total gas supply cost per dt for the current period decreased by ~~$.0544~~$0.3011 or ~~1.59%~~6.39% when compared to the prior period. This decrease is generally consistent with the prevailing trends in market indices and spot market prices observed in recent years.

The change in the **Other Gas Costs** primarily relates to the deferred account activity. These amounts reflect the offsetting accounting journal entries for the information actually recorded in the Company's Deferred Gas Cost Account during the review period. These entries also relate to items that are recorded in other cost of gas but do not impact the Company's deferred account.

Q. **MR DORGAN, ARE YOUR GAS COST COMPUTATIONS IN AGREEMENT WITH THE COMPANY'S SCHEDULES AS FILED IN THIS PROCEEDING?**

A. No. I have identified several discrepancies between the Company's schedules and the corresponding calculations of the Public Staff.

Q. **WERE YOU ABLE TO IDENTIFY THE NATURE OF THE DISCREPANCIES, OR OTHERWISE RECONCILE YOUR COMPUTATIONS TO THOSE OF THE COMPANY?**

A. Yes, I have been able to reconcile select, both not all, of the schedules incorporated into the testimony of Company witness Steele.

Q. **MR. DORGAN, WHICH SCHEDULES WERE YOU ABLE TO RECONCILE?**

A. With the assistance of Company responses to Public Staff Data Request No. 1, I was able to reconcile the following schedules: Schedule 1, Schedule 4, and Schedule 8. I have provided these reconciliations, with explanatory detail for all reconciling items, including the Company's proposed proration adjustment, which are attached as Public Staff Exhibit I.

PRORATION ADJUSTMENT

Q. **MS. PERRY, PLEASE EXPLAIN YOUR UNDERSTANDING OF FRONTIER'S PRORATION ADJUSTMENT.**

A. Ordering Paragraph 4 of the Commission's Order on Annual Review of Gas Costs issued on August 23, 2016, in Docket No. G-40, Sub 130 (2015 Annual Review Order), required Frontier to "begin prorating its Benchmark cost of gas in the calculation of its gas cost collections from customers in a manner consistent with how Frontier prorates customers' bills." In accordance with the 2015 Annual Review Order, Frontier started prorating its Benchmark cost of gas rate changes in its deferred account during the 2015-2016 annual review period. During the present review period, in Docket No. G-40, Subs 137 and 141, Frontier filed to change its Benchmark cost of gas effective February 1, 2017, and August 1, 2017, respectively. Based on the template that Frontier and the Public Staff previously agreed that the Company would use (in compliance with Ordering Paragraph 6 of the 2015 Annual Review Order), Frontier filed its February and August 2017 monthly deferred account reports with proration adjustments. During a scheduled audit visit in November 2017, the Company informed me that they had a potential issue with the proration adjustments filed during review period that impacted Frontier's annual review filing. We discussed Frontier's concerns and I requested that the Company send to me the Company's supporting calculations for my review. I received this information the day before Frontier made its annual review filing and did not have time to fully reconcile my calculations to the Company's.

Q. **WHAT IS YOUR RECOMMENDATION TO THE PROPOSED PRORATION ADJUSTMENT?**

A. I have reviewed the Company's proposed adjustment, as well as similar calculations of other LDCs, and I agree that the proration adjustment needs to be revised to reflect the actual unbilled volumes as compared to the estimated unbilled volumes when prorating a benchmark change. Based on the volume and revenue billing data provided by Frontier, I have determined that the proration adjustment correction should be a debit entry of $98,159, including interest, instead of the $104,724 as proposed by Frontier, which is shown on Public Staff Panel Exhibit II. I have recommended that Mr. Dorgan update the Company's deferred account balance as of September 30, 2017 for this adjustment.

HEDGING ACTIVITIES

Q. **MS. PERRY, PLEASE EXPLAIN HOW THE PUBLIC STAFF TYPICALLY CONDUCTS ITS REVIEW OF HEDGING ACTIVITIES.**

A. The Public Staff's review of the Company's hedging activities typically includes an analysis and evaluation of the following information:

1. The Company's monthly hedging costs, as reflected on the invoices of UGI Energy Services, LLC (UGI);
2. Detailed source documentation, such as physical gas confirmations, that support the amount of gas hedged and the strike prices;
3. Workpapers supporting the derivation of the maximum hedge volumes targeted;
4. The monthly summary of hedging costs (benefits);
5. Hedging plan documents that set forth the Company's gas price risk management policy, hedge strategy, and gas price risk management operations;
6. Communications with Company personnel throughout the review period regarding hedging matters;
7. Documentation from meetings of Frontier's Supply Team and the Risk Committee of its parent company, Gas Natural Inc.;
8. Testimony and exhibits of the Company's witnesses in the annual review of gas costs proceeding; and
9. Company responses to the Public Staff's data requests.

Q. PLEASE EXPLAIN YOUR UNDERSTANDING OF THE STANDARD SET FORTH BY THE COMMISSION FOR EVALUATING THE COMPANY'S HEDGING DECISIONS?

A. The appropriate standard for the review of hedging decisions by LDCs is set forth in the Commission's February 26, 2002, Order on Hedging in Docket No. G-100, Sub 84 (Hedging Order). In the Hedging Order, the Commission concluded that the purpose of hedging is to reduce the volatility of commodity costs. The Commission noted that hedging involves costs and risks and that it is possible that the long term cost of hedged gas will be higher than gas bought at market prices. The Commission stated it understands that, with the use of hedging mechanisms, costs and risks are accepted in exchange for reduced volatility.

The Commission concluded that hedging is an option that must be considered in connection with an LDCs gas purchasing practices. The Commission stated that an LDCs decision to make no effort to mitigate price spikes--including a decision not to hedge--would be a decision subject to review in the LDCs annual gas cost prudency review proceeding just as much as a decision to hedge.

The Commission further concluded that, if an LDC decides to hedge in some fashion, prudently incurred costs in connection with hedging should be treated as gas costs under G.S. 62-133.4. The Commission stated that while such costs cannot be pre-approved within the context of the annual gas cost prudency review, the Commission indicated that it recognized that the review of the prudency of a decision to hedge or not to hedge should be made on the basis of the information available at the time each decision is made, not on the basis of the information available at the time of the prudency review proceeding.

The Commission ordered that each LDC should address its current hedging policy and program in its testimony in each annual gas cost prudency review, explaining why and how it hedged or why it didn't hedge during the test period.

Q. PLEASE DESCRIBE FRONTIER'S HEDGING PROGRAM.

A. Frontier states that the hedging program is an integral part of an overall gas purchasing strategy that attempts to establish price stability, utilize cost efficient purchasing, and reduce the risk of price increases to customers. In its gas purchasing strategy, Frontier uses a weighted average, three-part approach in purchasing its physical gas supplies: first-of-the-month baseload, hedging, and daily swing. A core part of Frontier's strategy is to obtain reliability and price stability by fixing components of its gas costs, primarily commodity costs, through hedging.

The primary difference between Frontier's hedging approach compared to the approaches of the other LDCs is that Frontier uses physical hedges exclusively and does not use financial hedges, such as options, futures, or swaps. A physical hedge is a fixed price contract between two parties to buy or sell physical natural gas supplies at a certain future time, at a specific price, which is agreed upon at the time the deal is executed. Frontier's gas supply portfolio typically includes the physical purchase of fixed price gas supplies for delivery at its city gate on a monthly basis.

Q. PLEASE DESCRIBE YOUR UNDERSTANDING OF THE COMPANY'S HEDGING PROGRAM DURING THE REVIEW PERIOD.

A. Page 13 of Company witness Steele's testimony states as follows:

> Q. Did Frontier investigate hedging during the test year and, if so, what were the findings and conclusions?
>
> A. Frontier continually monitors the NYMEX natural gas commodity market and associated hedging developments, trends, activity and costs. Frontier did not engage in hedging activity during the current review period of October 2016 to September 2017. Additionally, Frontier evaluated a peak day proposal from UGI.

Also, in response to a Public Staff data request, the Company stated that "Frontier has determined not to utilize a physical hedge for any natural gas for the winter 2016-2017 because of its ability to purchase almost 70% of our gas supply needs at Zone 3 FOM [First of Month] prices as opposed to Zone 5 FOM prices."

Frontier's decision not to hedge during the review period appears to have been influenced by the fact that Frontier had enough physical gas purchases to serve its market during the review period rather than implementing hedges in an effort to mitigate price spikes to customers.

Q. BASED ON YOUR REVIEW AND ANALYSIS, WERE THE COMPANY'S HEDGING DECISIONS DURING THE REVIEW PERIOD PRUDENT?

A. While the Hedging Order does not differentiate between financial hedges and physical hedges, the other LDCs in North Carolina all have the ability to purchase 100% of their gas supply needs at FOM prices as opposed to Zone 5 FOM prices, yet all the other LDCs are consistently hedging to avoid the risk of price spikes to the utilities' customers. I believe Frontier's customers are similarly at risk of unforeseen price spikes in gas prices.

In my opinion, based on what was reasonably known or should have been known at the time the Company made its hedging decisions affecting the review period, as opposed to the outcome of those decisions, my analysis leads me to the conclusion that the decisions were prudent; however, the Public Staff recommends that the Commission remind Frontier that the purpose of hedging is to reduce price spikes to customers, not just to secure gas supply, and put Frontier on notice that the risk is on Frontier, not its ratepayers, if price spikes occur and no hedging strategies are in place in the future.

DESIGN DAY REQUIREMENTS

Q. MR. LARSEN, DO YOU HAVE ANY RECOMMENDATIONS REGARDING HOW FRONTIER IS PLANNING TO MEET FUTURE SYSTEM DEMAND?

A. Ordering Paragraph 6 of the Commission's Order on Annual Review of Gas Costs issued on June 13, 2017, in Docket No. G-40, Sub 135 (2016 Annual Review Order) required:

> [t]hat before the filing of Frontier's next annual review proceeding, Frontier shall have a study performed, similar to the consultant report attached to Company witness Steele's testimony as Exhibit FAS-1, discussing, among other things, peak day forecasts and determination of contract demand policy, and made available to the Public Staff for its review.

Attached to Company witness Steele's testimony as CONFIDENTIAL Exhibit B is a report on Design Day Study prepared by Dr. Ronald H. Brown, PhD, who utilized the Marquette University GasDay program in evaluating Frontier's projected peak day demand. I have evaluated this report and have concluded that it complies with the 2016 Annual Review Order and accurately calculates Frontier's peak day using reasonable assumptions, such as HDDs and frequency of occurrence of such cold weather events. Based on this report, it appears that Frontier has adequate capacity in order to serve its firm market on peak days until the 2021-2022 winter period. Due to the confidential nature of this document, I will not discuss any specifics of the report's findings.

DEFERRED ACCOUNT BALANCE

Q. MR. DORGAN, WHAT IS THE APPROPRIATE DEFERRED ACCOUNT BALANCE AS OF SEPTEMBER 30, 2017?

A. I have determined – based on (1) my review of the gas costs in this proceeding, (2) Ms. Perry's recommended proration adjustment to the deferred gas cost account, and (3) Mr. Larsen's opinion that the Company's gas costs were prudently incurred – that the appropriate balance in Frontier's Deferred Gas Cost Account at September 30, 2017, is a $251,005 debit balance, owed to Frontier. The following chart summarizes Frontier's Deferred Gas Cost Account activity for the current review period:

Filed Deferred Account Balance - October 1, 2016	**($7,899)**
Commodity Gas Cost True-up	249,206
Commodity True-up Adjustments	(71,406)
Transportation Customer Balancing True-up	(33,169)
Transportation Customer Balance Adjustment	5,150
Transco Refund	(15)
Interest	10,982
Rounding/Other	(4)
Filed Deferred Account Balance - September 30, 2017	**$152,846**
Public Staff Adjustment to Benchmark Proration incl. Interest	98,159
Public Staff Recommended Deferred Account Balance - September 30, 2017	**$251,005**

Q. MR. LARSEN, WHAT IS YOUR RECOMMENDATION REGARDING ANY PROPOSED INCREMENTS/DECREMENTS?

A. Company witness Steele testified that Frontier anticipated that the current deferred account balance will be moving back toward $0.00 over the winter months. Frontier did not propose any temporaries in this proceeding. As shown in the chart above, Public Staff witness Dorgan states that the appropriate deferred account balance owed from customers to Frontier is a debit balance of $251,005. While normally the Public Staff would recommend a temporary rate increment in order to collect this debit balance from customers, based on our investigation we have determined that Frontier's deferred account has changed significantly since the end of the review period. Consequently, I recommend that Frontier file for a Purchased Gas Adjustment (PGA) in mid-March for an effective date of April 1, 2018. I believe this course of action would more quickly and accurately resolve the under-collection of gas costs and would take effect April 1, 2018, which is two or more months earlier than an order would typically be issued in Frontier's annual review proceeding. Therefore, I do not recommend any temporary rate increments or decrements at this time.

ADDITIONAL RECOMMENDATIONS

Q. MS. PERRY, DO YOU HAVE ANY RECOMMENDATIONS REGARDING THE INTEREST RATE ON FRONTIER'S DEFERRED ACCOUNT?

A. Yes. In Docket No. G-40, Sub 135, Frontier's prior annual review of gas costs proceeding, the Public Staff recommended and the Commission approved in its Order on Annual Review of Gas Costs issued June 13, 2017, that Frontier shall begin calculating interest on its deferred account using the net-of-tax overall rate of return approved by the Commission in its Order Approving Use of Natural Gas Bond Funds issued March 12, 2000, in Docket No. G-40, Sub 2, adjusted for any known corporate income tax rate changes, as the applicable interest rate on all amounts over-collected or under-collected from customers reflected in its Deferred Gas Cost Account.

Also in 2017, the Public Staff investigated a merger application filed by Frontier in November 2016 (Docket No. G-40, Sub 136), which caused the Public Staff to further evaluate the appropriate determinants to be used to calculate the earnings of Frontier in order to determine a reasonable overall rate of return applicable to Frontier. This review included the capital structure, debt cost from Frontier's most recent financing docket (Docket No. G-40, Sub 133), and a reasonable return on equity.

In addition, the 2017 Federal Tax Cuts and Jobs Act has reduced the corporate federal income tax rate from 35% to 21%, effective January 1, 2018.

In light of the foregoing, the Public Staff recommends that Frontier begin using 6.50% as the interest rate on the deferred gas cost account effective January 1, 2018, as shown on Public Staff Panel Exhibit III.

Q. MS PERRY, DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING THE REPORTING OF FRONTIER'S ANNUAL REVIEW SCHEDULES.

A. Yes. I am concerned that the amounts contained the Company's filed annual review exhibits do not match the monthly deferred account reports filed with the Commission due to (1) the Company inserting proposed proration adjustments into the annual review exhibits that had not been filed with the Commission in the monthly deferred account reports for those months, and (2) the Company re-classifying demand and commodity charges reflected in the annual review exhibits, which do not correlate to charges reflected in the monthly deferred account reports and the invoices reviewed by the Public Staff.

Typically, if an LDC believes that a proposed adjustment is warranted, the adjustment is noted in testimony and possibly on Schedule 8 – Deferred Account with a footnote, but the LDC does not restate the total gas costs for the review period. The Public Staff's review procedures include tracing the Company's filed annual review exhibits to the monthly deferred account filings made each month during the review period. Another review procedure agrees the total cost of gas reflected on Schedule 1 to the cost of gas reflected in the monthly financial statements. By the Company inserting the proposed adjustments and restating Schedules 1 and

4, not only do the deferred account entries not agree to the filed deferred account reports, but Frontier's filed total cost of gas does not agree to the GS-1 Reports or the monthly financial reports filed by Frontier with the Public Staff and Commission.

A second issue relates to Frontier's reclassifications of demand and commodity charges in the annual review exhibits as compared to the monthly deferred account reports. Although the total demand and commodity charges reported in the annual review exhibits do agree to the filed monthly deferred account reports, the reclassification of the types of charges reflected in the annual review makes it virtually impossible for the Public Staff to trace specific charges into the monthly deferred account filings. The Public Staff had a similar issue in Frontier's prior annual review of gas costs proceeding and recorded the unreconciled amounts in other supply costs. For the current review period, the Public Staff has presented the demand and commodity charges in our testimony exactly as these charges were reflected on the invoices supporting the monthly deferred account entries that we audited. We have also reflected the Other Gas Costs just as these were filed by the Company in the monthly deferred account filings along with entries that are recorded in other cost of gas but do not impact the Company's deferred account. In addition, we excluded the Company's proposed proration adjustments from Other Gas Cost charges since these were not filed during the review period. By reflecting the information in this manner, we are able to agree the total cost of gas to the financial statements and also now able to state that these amounts agree to our audited monthly deferred account files. Since this has been a recurring issue, the Public Staff recommends that the Commission require Frontier to file annual review schedules that present a summary of its gas costs that agree with its monthly deferred account reports in future annual review proceedings.

Q. DOES THIS CONCLUDE THE PUBLIC STAFF'S TESTIMONY?

A. Yes, it does.

APPENDIX A

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

APPENDIX B

SHAWN L. DORGAN

Qualifications and Experience

I am a two-time accounting graduate of Appalachian State University, having earned a B.S.B.A. in Accountancy in 1988 and a Master's of Science in Accountancy (concentration in taxation; functional equivalent of an MST) in 1997. After graduation in August of that year I entered the public accounting industry, working first at the Charlotte practice office of Deloitte & Touche LLP, and later for several local and regional accounting firms in the metro-Charlotte, metro-Raleigh, and metro-Atlanta areas. I am a Certified Public Accountant, licensed in the State of North Carolina. My license number is 27030.

I joined the Public Staff in May 2016, and since have performed numerous cost reviews in both the Natural Gas and Electric Divisions, focusing primarily on annual gas cost reviews, as well as program cost reviews of energy efficiency programs authorized for the state's electric utilities under N.C.G.S. §62-133.9 – *Cost recovery for demand-side management and energy efficiency measures*.

Additionally, I have provided accounting support for several recent high-profile rate cases involving North Carolina's largest electric utilities, focusing in particular on applicant rate-base requests in the area of cash working capital. This support centered primarily on analyses of accounting transactions underlying applicant lead-lag schedules.

APPENDIX C

JULIE G. PERRY

Qualifications and Experience

I graduated from North Carolina State University in 1989 with a Bachelor of Arts degree in Accounting and I am a Certified Public Accountant.

Prior to joining the Public Staff, I was employed by the North Carolina State Auditor's Office. My duties there involved the performance of financial and operational audits of various state agencies, community colleges, and Clerks of Court.

I joined the Public Staff in September 1990, and was promoted to Supervisor of the Natural Gas Section in the Accounting Division in September 2000. I was promoted to Accounting Manager – Natural Gas & Transportation effective December 1, 2016. I have performed numerous audits and/or presented testimony and exhibits before the Commission addressing a wide range of natural gas topics.

Additionally, I have filed testimony and exhibits in numerous water rate cases and performed investigations and analyses addressing a wide range of topics and issues related to the water, electric, transportation, and telephone industries.

COMMISSIONER MITCHELL: So does that take care of all the evidence at this point?

MS. CULPEPPER: Did you also enter the three exhibits? I'm sorry.

COMMISSIONER MITCHELL: No, I did not. And the exhibits to the Public Staff's joint testimony will be received into evidence as well, also marked as prefiled.

(WHEREUPON, Public Staff Panel Exhibits I, II and III were marked for identification as prefiled and received into evidence.)

MS. CULPEPPER: Thank you.

COMMISSIONER MITCHELL: So does that take care of all the evidence at this point?

MR. JEFFRIES: I believe it does.

MS. CULPEPPER: Uh-huh (yes).

COMMISSIONER MITCHELL: Okay. And one additional matter to discuss before we move to post-hearing filings. As I stated earlier, Commissioners ToNola D. Brown-Bland and Lyons Gray are members of the panel on this proceeding; however, they are presently engaged in another Commission hearing and were unable to be present for this hearing in this docket. All of the evidence in this docket was stipulated into the record and there's been no cross examination of the witnesses. Therefore, do the parties have any concerns or objections to Commissioners Brown-Bland and Gray continuing to serve on the panel and participating in the decision in this docket?

MS. CULPEPPER: No, ma'am.

MR. JEFFRIES: No objections from Frontier.

COMMISSIONER MITCHELL: Thank you. Is there anything else that we need to address prior to discussing proposed orders?

MS. CULPEPPER: No.

COMMISSIONER MITCHELL: Is there any reason why proposed orders of the parties cannot be filed within 30 days of today's date?

MR. JEFFRIES: I'm fine with that.

MS. CULPEPPER: No.

COMMISSIONER MITCHELL: Okay. Then proposed orders will be due 30 days from today. Anything further?

MR. JEFFRIES: No.

MS. CULPEPPER: No. No, ma'am.

COMMISSIONER MITCHELL: If not, thank you very much, and we are adjourned.

(WHEREUPON, the proceedings were adjourned.)

C E R T I F I C A T E

I, KIM T. MITCHELL, DO HEREBY CERTIFY that the Proceedings in the above-captioned matter were taken before me, that I did report in stenographic shorthand the Proceedings set forth herein, and the foregoing pages are a true and correct transcription to the best of my ability.

Kim T. Mitchell
Court Reporter II

FILED

APR 09 2018

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