



**NORTH CAROLINA
PUBLIC STAFF
UTILITIES COMMISSION**

February 22, 2018

Ms. M. Lynn Jarvis, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

Re: Docket No. G-40, Sub 145

Dear Ms. Jarvis:

In connection with the above-captioned docket, I transmit herewith for filing on behalf of the Public Staff the Joint Testimony and Exhibits of Jan A. Larsen, Director, Natural Gas Division; Shawn L. Dorgan, Staff Accountant, Accounting Division; and Julie G. Perry, Accounting Manager, Natural Gas & Transportation Section, Accounting Division.

By copy of this letter, I am forwarding a copy of the above to all parties of record.

Sincerely,

Electronically submitted
/s/ Elizabeth D. Culpepper
Staff Attorney
elizabeth.culpepper@psncuc.nc.gov

c: Parties of Record

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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**

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

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

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

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

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

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

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

9 A. The purpose of my testimony is (1) to present the results of my
10 review of the gas cost information filed by Frontier in accordance
11 with G.S. 62-133.4(c) and Commission Rule R1-17(k)(6), (2) to
12 provide my conclusions regarding whether the gas costs incurred
13 by Frontier during the 12-month review period ended September
14 30, 2017, were properly accounted for, and (3) to discuss any
15 changes to the deferred account reporting during the review period.

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

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

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

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

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

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

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

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

23

CUSTOMER GROWTH

1
2 **Q. HOW HAVE FRONTIER'S CUSTOMERS AND THROUGHPUT**
3 **CHANGED SINCE THE COMPANY'S LAST ANNUAL REVIEW**
4 **OF GAS COSTS PROCEEDING?**

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

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

1 **Q. MR. LARSEN, DID FRONTIER ACQUIRE ADDITIONAL PIPELINE**
2 **CAPACITY DURING THE REVIEW PERIOD?**

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

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

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

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

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

20 A. Even though the scope of Commission Rule R1-17(k) is limited to a
21 historical review period, the Public Staff's Natural Gas Division also
22 considers other information received pursuant to the data requests
23 in order to anticipate the Company's requirements for future needs,

1 including design day estimates, forecasted gas supply needs,
2 projection of capacity additions and supply changes, and customer
3 load profile changes.

4 **ACCOUNTING FOR AND ANALYSIS OF GAS COSTS**

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

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

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

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

- 1 (2) **Transportation Customer Balancing True-Up** – The
2 monthly Cash-Out Report for each marketer is reviewed and
3 all calculations for cash-out amounts are verified.
- 4 (3) **Interest Accrual** – Interest accrual calculations on the
5 outstanding Deferred Gas Cost Account balances are
6 verified.
- 7 (4) **Hedging Transactions** – The cost of hedging transactions
8 are traced to the supporting documentation, and are verified
9 for mathematical accuracy.
- 10 (5) **Temporary Increments and/or Decrements** – All
11 calculations and supporting data regarding collections from
12 and/or refunds to customers that are recorded in the
13 Deferred Gas Cost Account are verified, and supporting data
14 and schedules are reviewed.
- 15 (6) **Supplier Refunds** – In Docket No. G-100, Sub 57, the
16 Commission held that, unless it orders refunds to be handled
17 differently, supplier refunds should be flowed through to
18 ratepayers through a company's deferred account. I
19 reviewed documentation received by the Company from its
20 suppliers to ensure that the amount received by the
21 Company is flowed through to ratepayers.

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

4 A. Frontier's total gas costs for the current review period per the
5 Company's monthly deferred account reports filed with the
6 Commission were \$4,641,053, as compared to the prior year of
7 \$5,242,868. In the current review period, in order to agree the cost
8 of gas to the GS-1 Reports filed with the Commission, we reflected
9 the offsetting gas cost true-up entries of \$149,768 as well as entries
10 that are recorded in other cost of gas but do not impact the
11 Company's deferred account of \$58,454, resulting in a total cost of
12 gas for the current review period of \$4,699,507. The components of
13 gas costs incurred for the two periods are as follows:

Frontier Energy, LLC

Docket No. G-40, Sub 145

Comparison of Gas Cost

Line		12 Months Ended		Increase (Decrease)	% Change
		Sept. 30, 2017	Sept. 30, 2016 [1]		
	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	\$3.4722	\$3.4178	\$0.0544	1.59%

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.

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

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

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

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

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

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

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

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

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

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

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

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

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

21 PRORATION ADJUSTMENT

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

1 A. Ordering Paragraph 4 of the Commission's Order on Annual
2 Review of Gas Costs issued on August 23, 2016, in Docket No.
3 G-40, Sub 130 (2015 Annual Review Order), required Frontier to
4 "begin prorating its Benchmark cost of gas in the calculation of its
5 gas cost collections from customers in a manner consistent with
6 how Frontier prorates customers' bills." In accordance with the
7 2015 Annual Review Order, Frontier started prorating its
8 Benchmark cost of gas rate changes in its deferred account during
9 the 2015-2016 annual review period. During the present review
10 period, in Docket No. G-40, Subs 137 and 141, Frontier filed to
11 change its Benchmark cost of gas effective February 1, 2017, and
12 August 1, 2017, respectively. Based on the template that Frontier
13 and the Public Staff previously agreed that the Company would use
14 (in compliance with Ordering Paragraph 6 of the 2015 Annual
15 Review Order), Frontier filed its February and August 2017 monthly
16 deferred account reports with proration adjustments. During a
17 scheduled audit visit in November 2017, the Company informed me
18 that they had a potential issue with the proration adjustments filed
19 during review period that impacted Frontier's annual review filing.
20 We discussed Frontier's concerns and I requested that the
21 Company send to me the Company's supporting calculations for my
22 review. I received this information the day before Frontier made its

1 annual review filing and did not have time to fully reconcile my
2 calculations to the Company's.

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

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

16 **HEDGING ACTIVITIES**

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

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

23

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

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

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

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

17 The Commission further concluded that, if an LDC decides to
18 hedge in some fashion, prudently incurred costs in connection with
19 hedging should be treated as gas costs under G.S. 62-133.4. The
20 Commission stated that while such costs cannot be pre-approved
21 within the context of the annual gas cost prudence review, the
22 Commission indicated that it recognized that the review of the
23 prudence of a decision to hedge or not to hedge should be made on

1 the basis of the information available at the time each decision is
2 made, not on the basis of the information available at the time of
3 the prudency review proceeding.

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

8 **Q. PLEASE DESCRIBE FRONTIER'S HEDGING PROGRAM.**

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

18 The primary difference between Frontier's hedging approach
19 compared to the approaches of the other LDCs is that Frontier uses
20 physical hedges exclusively and does not use financial hedges,
21 such as options, futures, or swaps. A physical hedge is a fixed
22 price contract between two parties to buy or sell physical natural

1 gas supplies at a certain future time, at a specific price, which is
2 agreed upon at the time the deal is executed. Frontier's gas supply
3 portfolio typically includes the physical purchase of fixed price gas
4 supplies for delivery at its city gate on a monthly basis.

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

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

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

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

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

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

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

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

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

21

DESIGN DAY REQUIREMENTS

1

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

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

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

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

DEFERRED ACCOUNT BALANCE

1

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

4 A. I have determined – based on (1) my review of the gas costs in this
5 proceeding, (2) Ms. Perry's recommended proration adjustment to
6 the deferred gas cost account, and (3) Mr. Larsen's opinion that the
7 Company's gas costs were prudently incurred – that the
8 appropriate balance in Frontier's Deferred Gas Cost Account at
9 September 30, 2017, is a \$251,005 debit balance, owed to Frontier.
10 The following chart summarizes Frontier's Deferred Gas Cost
11 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	<u>\$152,846</u>
Public Staff Adjustment to Benchmark Proration incl. Interest	<u>98,159</u>
Public Staff Recommended Deferred Account Balance - September 30, 2017	<u>\$251,005</u>

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

14 A. Company witness Steele testified that Frontier anticipated that the
15 current deferred account balance will be moving back toward \$0.00
16 over the winter months. Frontier did not propose any temporaries

1 in this proceeding. As shown in the chart above, Public Staff
2 witness Dorgan states that the appropriate deferred account
3 balance owed from customers to Frontier is a debit balance of
4 \$251,005. While normally the Public Staff would recommend a
5 temporary rate increment in order to collect this debit balance from
6 customers, based on our investigation we have determined that
7 Frontier's deferred account has changed significantly since the end
8 of the review period. Consequently, I recommend that Frontier file
9 for a Purchased Gas Adjustment (PGA) in mid-March for an
10 effective date of April 1, 2018. I believe this course of action would
11 more quickly and accurately resolve the under-collection of gas
12 costs and would take effect April 1, 2018, which is two or more
13 months earlier than an order would typically be issued in Frontier's
14 annual review proceeding. Therefore, I do not recommend any
15 temporary rate increments or decrements at this time.

16 **ADDITIONAL RECOMMENDATIONS**

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

20 **A.** Yes. In Docket No. G-40, Sub 135, Frontier's prior annual review of
21 gas costs proceeding, the Public Staff recommended and the
22 Commission approved in its Order on Annual Review of Gas Costs
23 issued June 13, 2017, that Frontier shall begin calculating interest

1 on its deferred account using the net-of-tax overall rate of return
2 approved by the Commission in its Order Approving Use of Natural
3 Gas Bond Funds issued March 12, 2000, in Docket No. G-40, Sub
4 2, adjusted for any known corporate income tax rate changes, as
5 the applicable interest rate on all amounts over-collected or under-
6 collected from customers reflected in its Deferred Gas Cost
7 Account.

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

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

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

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

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

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

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

5 A second issue relates to Frontier's reclassifications of demand and
6 commodity charges in the annual review exhibits as compared to
7 the monthly deferred account reports. Although the total demand
8 and commodity charges reported in the annual review exhibits do
9 agree to the filed monthly deferred account reports, the
10 reclassification of the types of charges reflected in the annual
11 review makes it virtually impossible for the Public Staff to trace
12 specific charges into the monthly deferred account filings. The
13 Public Staff had a similar issue in Frontier's prior annual review of
14 gas costs proceeding and recorded the unreconciled amounts in
15 other supply costs. For the current review period, the Public Staff
16 has presented the demand and commodity charges in our
17 testimony exactly as these charges were reflected on the invoices
18 supporting the monthly deferred account entries that we audited.
19 We have also reflected the Other Gas Costs just as these were
20 filed by the Company in the monthly deferred account filings along
21 with entries that are recorded in other cost of gas but do not impact
22 the Company's deferred account. In addition, we excluded the
23 Company's proposed proration adjustments from Other Gas Cost

1 charges since these were not filed during the review period. By
2 reflecting the information in this manner, we are able to agree the
3 total cost of gas to the financial statements and also now able to
4 state that these amounts agree to our audited monthly deferred
5 account files. Since this has been a recurring issue, the Public
6 Staff recommends that the Commission require Frontier to file
7 annual review schedules that present a summary of its gas costs
8 that agree with its monthly deferred account reports in future annual
9 review proceedings.

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

11 **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.

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.

Public Staff Panel Exhibit I

Frontier Natural Gas, LLC
Docket No. G-40, Sub 145

Reconciliation of Results of Company Monthly Filings with the Public Staff and the Commission and the Schedules of Company Witness Fred A. Steele

	<u>Company</u>	<u>Public Staff</u>	<u>Difference</u>
Schedule 1 - Total Cost of Gas	\$ 4,804,228	\$ 4,641,053 [1]	\$ 163,175 Ⓐ
Schedule 4 - Other Cost of Gas	\$ 13,800	\$ (149,768)	\$ 163,568 Ⓑ
Schedule 8 - Period End Deferred Gas Cost Account Balance	\$ 262,677	\$ 152,851 [2]	\$ 109,826 Ⓒ

Ⓐ Reconciling Items - Total Cost of Gas:

Company Proposed Proration Adjustment	\$ 104,724
Miscellaneous Charges - Net Cash Out	58,459
Rounding	(8)
	<u>\$ 163,175</u>

Ⓑ Reconciling Items - Other Cost of Gas:

Company Proposed Proration Adjustment	\$ 104,724
Retro Gas Pricing True-up Entry (booked by Public Staff as a Gas Supply Cost, not a Deferred Account)	390
Miscellaneous Charges - Net Cash Out	58,459
Rounding	(5)
	<u>\$ 163,568</u>

Ⓒ Reconciling Items - Ending Deferred Account Balance:

Company Proposed Proration Adjustment	\$ 104,724
<u>Interest Differential:</u>	
Interest - Per Frontier Schedule 8	\$ 16,091
<u>LESS: Interest per monthly deferred account filings with the Commission</u>	<u>(10,982)</u>
Rounding	(7)
	<u>\$ 109,826</u>

Notes:

[1] - Does not include Additional Non Deferred Account Related Gas Costs (Comparison of Gas Cost Chart, Line 11)

[2] - Does not include Ms. Perry's recommended Proration Adjustment

Frontier Natural Gas Company
Docket No. G-40, Sub 145
Public Staff Recommended Correcting Entries
To Deferred Gas Cost Account Balance
(Debit) Credit

Public Staff Panel Exhibit II
Page 1 of 2

Correcting Journal Entries as of:	Beginning Balance	Public Staff Adjustment	Interest	Gas Cost Collection Adjustment w/ Interest
Feb-17	\$0	\$112,975	\$723	\$113,698
Mar-17	\$113,698		\$728	\$114,426
Apr-17	\$114,426		\$732	\$115,158
May-17	\$115,158		\$737	\$115,895
Jun-17	\$115,895		\$742	\$116,637
Jul-17	\$116,637		\$746	\$117,383
Aug-17	\$117,383	(21,564)	\$613	\$96,432
Sep-17	\$96,432	1,102	\$624	\$98,159
		<u>\$92,513</u>	<u>\$5,646</u>	
		<u>\$98,159</u>		

Annual Interest Rate	7.680%
Monthly Interest Rate	0.640%

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Feb 22 2018

Frontier Natural Gas
Gas Cost Collections - Public Staff Proration
For the Review Period Ending September 30, 2017

Public Staff Panel Exhibit II
Page 2 of 2

	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17	Dec-16	Nov-16	Oct-16	Adjustment
Deferred Acct Volumes:													
Frontier Filed Dts	[1] 77,424	53,612	39,031	45,861	55,472	60,961	125,756	106,271	152,108	149,841	82,371	64,382	
PS Calculated Dts	[2] 77,149	53,611	39,030	45,861	55,471	60,960	125,756	106,271	152,109	149,840	82,371	64,382	
Difference	275	1	1	0	1	1	0	0	(1)	1	0	0	279 dts

Deferred Account Collections:													
Frontier Filed Collections	[1] 309,696	186,398	\$220,525	\$259,115	\$313,417	\$344,430	\$710,521	\$700,582	\$532,378	\$524,444	\$288,299	\$225,337	
PS Calculated Collections	[2] \$308,594	207,962	220,527	259,114	313,416	344,426	\$710,519	\$587,607	\$532,378	\$524,442	\$288,300	\$225,338	
Difference	\$1,102	(\$21,564)	(\$2)	\$1	\$1	\$4	\$2	\$112,975	\$0	\$2	(\$2)	(\$1)	\$92,518 Total (5) Rounding \$92,513

[1] Per Company deferred account true-up filed with the Commission.

[2] Revised proration - per Frontier supporting deferred account information filed each month - Revenue Detail, Invoices tab.

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Feb 22 2018

Frontier
Docket No. G-40, Sub 136
Calculation of Pre-Tax Rate-of-Return and Net-of-Tax Discount Rate

Public Staff Panel Exhibit III

Item	Capital Structure	Cost Rate	Weighted Rate	Tax Factor	Pre-Tax ROR	Net-of-Tax ROR
L-T Debt	50.00%	4.23%	2.12%	1.000000	2.1150%	1.6207%
Equity	50.00%	9.75%	4.88%	0.766300	6.3617%	4.8750%
Total	100.00%		6.99%		8.476738%	6.495725%
						<u>6.496%</u>

Composite Income Tax Factor:

a	State Taxable Income		1.000000
b	State income taxes		0.030000
c	Federal Taxable Income	[a - b]	0.970000
d	Federal income taxes	[c x 21%]	0.203700
e	Net Income	[c - d]	<u>0.766300</u>

Assumptions:

SIT rate	3.00%
FIT rate	21.00%
Composite	23.3700%