

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**IN THE MATTER OF:**

ELECTRONIC APPLICATION FOR REVISED )	
QUARTERLY GAS COST RECOVERY )	CASE NO.
SCHEDULES OF KENTUCKY )	2023-00067
FRONTIER GAS, LLC )	

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**NOTICE**

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Comes now Kentucky Frontier Gas, LLC (“Kentucky Frontier”) by and through the undersigned counsel, and does hereby state as follows for its Notice that Kentucky Frontier filed a proposed revised tariff through the electronic tariff filing system for the Commission’s consideration and approval on June 5, 2023 pursuant to the Commission’s April 10, 2023 Order in this matter, and furthermore, Kentucky Frontier respectfully states as follows:

1. As Attachment A, Kentucky Frontier has attached the customer notification of a change in rates that was mailed to Frontier customers on May 24, 2023 and the verification of same, pursuant to 807 KAR 5:011, Sec. 8, and the Commission’s April 10, 2023 Order.

2. As Attachment B, Kentucky Frontier has also attached the verified testimony of Steven Shute, owner of Frontier and industry professional with over 40 years of experience, in support of the revision proposed in this matter. Mr. Shute’s testimony is filed as supplemental information to the Application in this matter and Exhibit B to the Application filed on February 24, 2023, which includes examples of the proposed Gas Balancing Account and the information intended to be filed in the schedules filed quarterly by Frontier, described in further detail by Mr. Shute’s filed testimony.

WHEREFORE, based on the foregoing, Kentucky Frontier gives the Commission notice of the pending tariff filing currently under review.

Dated this 5<sup>th</sup> day of June, 2023.

Respectfully submitted,



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*Counsel for Kentucky Frontier Gas, LLC*

**CERTIFICATE OF SERVICE**

This is to certify that foregoing electronic filing was transmitted to the Commission on June 5, 2023; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding; and that pursuant to the Commission's July 22, 2021 Order in Case No. 2020-00085, no paper copies of the filing will be made.



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*Counsel for Kentucky Frontier Gas, LLC*

**VERIFICATION PURSUANT TO 807 KAR 5:011**

The undersigned, Michelle Robinson, first being duly sworn, deposes and says that she is the Office Leader for Kentucky Frontier Gas, LLC that she was responsible for mailing, first class mail, the notice of the proposed rate/tariff change to Kentucky Frontier Gas, LLC customers. The notice was mailed on May 24, 2023 to its customers. The notice contained the information required by 807 KAR 5:011. A sample copy of the notice is attached to this Verification.

  
MICHELLE ROBINSON

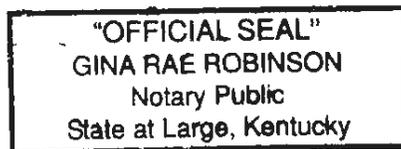
STATE OF KENTUCKY     )  
  )  
COUNTY OF FLOYD     )

Subscribed, sworn and acknowledged to before me by <sup>Michelle</sup>~~Robinson~~ this 1 day of  
June, 2023.

  
NOTARY PUBLIC, STATE AT LARGE

MY COMMISSION EXPIRES: 11-19-26

# 094299



NOTICE OF KENTUCKY FRONTIER GAS, LLC TO REVISE ITS TARIFF  
 BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

Pursuant to the Public Service Commission’s (“PSC”) regulation 807 KAR 5:011, Kentucky Frontier Gas, LLC (“Frontier”) gives notice that a tariff filing will be made with the PSC on or after June 1, 2023 to propose a revised gas cost recovery (“GCR”) formula and a revised 7.5 percent limiter from the current 5 percent limiter on lost and unaccounted for gas volume. This is the subject of Case No. 2023-00067, *Electronic Application for Revised Quarterly Gas Cost Recovery Schedules for Kentucky Frontier Gas, LLC*. The change in GCR formula will go into effect July 1, 2023, or sooner if approved by the PSC. The revised formula as proposed consists of changing the formula to **GCR= Expected Gas Cost (“EGC”) + Balancing Adjustment (“BA”) or GCR= EGC + BA** from the current formula set out in the tariff as **GCR = EGC + RA (“Refund Adjustment”) + AA (“Actual Adjustment”) + BA**. The Gas Balancing Account (“GBA”) is a running balance and will be updated first using the actual gas purchases and sales. The GBA will show the actual balance of the gas cost account, and combine the amounts previously figured through the RA + AA + BA calculation into one quarterly adjustment. The GBA spreadsheet will be filed with each quarterly GCR filing to show the monthly gas purchase costs and the gas cost recoveries. The over/under recoveries are the monthly difference between gas costs recovered from sales, compared with the purchased gas costs. The monthly over/under recoveries are added to the running, cumulative balance in the GBA spreadsheet. Next, the quarterly BA will be calculated by dividing the ending GBA balance by the expected Sales volume over the next twelve-month period. The BA is calculated to amortize to zero the running balance of the GBA over the next twelve months of sales. The supplier RA will be accounted for in the new GBA, as any refunds received from suppliers during the reporting period, plus interest. The former AA is incorporated into the new BA. The combined, single BA adjustment each quarter will more quickly respond to price volatility to ensure that the GBA balance will remain within reasonable variations. Frontier is also updating its calendar quarters in its tariff and changing the reference units from MCF to CCF to be consistent with its customer bills.

\*Not actual rates-example to show how the revised formula would have adjusted an average of rates from Jan. 31, 2022-Jan. 31, 2023.

Customer Class	Calculated Using Current GCR Formula \$/CCF	Calculated Using Proposed Revised GCR Formula \$/CCF	Difference in Rates Shown in \$0.00 \$/CCF	Difference in Rates Shown in %
Frontier Res/ Sm Commercial	\$0.9414	\$1.0271	\$0.0857	9%
Frontier Lg Com	\$0.8639	\$.9496	\$0.0857	10%
Daysboro Resid	\$0.9694	\$1.0551	\$0.0857	9%
Daysboro Comm	\$1.3764	\$1.4621	\$0.0857	6%

The Public Service Commission has requested that Frontier provide an example of how the proposed revised GCR Formula would apply to an average of rates of customers over a 12-month period ending January 31, 2023, comparing the average rates applying the current GCR Formula and the average rates applying the proposed GCR Formula by Frontier, but the Commission may order rates to be charged that differ from the proposed rates contained in this notice. There are many factors that affected the rates during those twelve months that may have skewed the representative figures above including the volatility of the gas market and actions taken by Frontier to adjust to that volatility. The main change in the proposed Revised GCR Formula is that it will allow a quicker response to variation in the GCR. The revised GCR formula will allow Frontier to maintain a running balance that will be part of the quarterly filings in the public record, and this will track any over/under recoveries in the difference between gas costs recovered with a reduced amount of lag time between the actual over/under recovery and the adjustment to true-up that difference between gas costs recovered from Sales, compared with the Purchased Gas Costs. Additionally, the Public Service Commission imposed a 5 percent limiter on lost and unaccounted for gas volume that is not in the Frontier tariff. Frontier has replaced many older lines of its system, but still maintains several systems in need of upgrades. Because of the condition of the Frontier system, and the very low rural density of meters and volume sales per mile of pipe compared with other Kentucky utilities, Frontier requests the Public Service Commission grant it a 7.5 percent limiter to allow it greater ability to upgrade the condition of its older lines. The table above is representative of the revised GCR formula applied to an average of rates from last year, however, it does not represent the actual charges that will be applied through the GCR quarterly filing.

Any corporation, association, or person may within thirty (30) days after the date of mailing this notice of the proposed rate change, submit a written request to intervene to the Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602, establishing the grounds for the request and including the status and interest of the party. If the Commission does not receive a written request for intervention within thirty (30) days of the initial publication or mailing of the notice, the commission may take final action on the tariff filing. Written comments regarding this tariff filing may be submitted to the Public Service Commission through its web site at <http://psc.ky.gov/> or mailed to the Public Service Commission at 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Copies of Frontier’s tariff filing may be obtained or viewed at no charge from Frontier at 2963 Ky Route 321 North, Prestonsburg, KY 41653. The tariff filing and all documents filed with the Public Service Commission may be viewed at the Commission’s offices located at 211 Sower Boulevard, Frankfort, Kentucky, Monday through Friday from 8:00 a.m. to 4:30 p.m. or downloaded at the Public Service Commission’s website at <http://psc.ky.gov/>.

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FRONTIER GAS, LLC )	

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**DIRECT TESTIMONY OF STEVEN SHUTE**  
**ON BEHALF OF KENTUCKY FRONTIER GAS, LLC**

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June 5, 2023

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**IN THE MATTER OF:**

ELECTRONIC APPLICATION FOR REVISED	)	
QUARTERLY GAS COST RECOVERY	)	CASE NO.
SCHEDULES OF KENTUCKY	)	2023-00067
FRONTIER GAS, LLC	)	

**VERIFICATION OF STEVEN SHUTE**

COMMONWEALTH OF ~~KENTUCKY~~ <sup>GARFIELD</sup> )  
COUNTY OF ~~FLOYD~~ <sup>COLORADO</sup> )

Steven Shute, Sole Member of Kentucky Frontier Gas, LLC, being duly sworn, states that he has supervised the preparation of his Direct Testimony in the above-referenced case and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.



Steven Shute

The foregoing Verification was signed, acknowledged and sworn to before me this 1st day of June, 2023, by Steven Shute.



Notary Commission No. \_\_\_\_\_

Commission expiration: \_\_\_\_\_

<p><b>ELZBIETA JASZCZAK</b>  <b>NOTARY PUBLIC</b>  <b>STATE OF COLORADO</b>  NOTARY ID 20224002317  MY COMMISSION EXPIRES 01/18/2026</p>
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1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.**

2 A. Steven Shute, 2963 Kentucky Route 321 North in Prestonsburg KY 41653. I am a natural  
3 gas utility and pipeline engineer and run several rural gas utilities. I reside in Colorado.

4 **Q. PLEASE STATE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.**

5 A. I earned a Bachelor of Science in Electrical Engineering from Kansas State University and  
6 am registered as a Professional Engineer in Colorado and Utah. I've worked as a natural  
7 gas engineer and manager or executive for more than 40 years, with Conoco Pipeline then  
8 a multi-state gas utility before forming my own organization in 1991. I am founder and  
9 owner of Pinedale Natural Gas in Wyoming and partner in several others, with about  
10 10,000 meters from Kentucky to California.

11 **Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR DUTIES AT**  
12 **KENTUCKY FRONTIER.**

13 A. I was one of 3 co-founders of Frontier in 2005. The other 2 partners have retired, and I am  
14 now sole member and owner. I serve as Managing Member of Frontier with oversight over  
15 all financial and operational and occupational matters.

16 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY PUBLIC**  
17 **SERVICE COMMISSION?**

18 A. Yes. Frontier has put together a dozen small gas utilities to form a single brand with about  
19 5500 customers. Frontier filed its initial purchase Case 2005-00348 and finance Case  
20 2008-00394 to join several struggling gas utilities in Eastern Kentucky. Frontier acquired  
21 Auxier Gas with Case 2009-00442 and various assets from Interstate Gas in Case 2010-  
22 00076, then consolidated rates among all Frontier utilities in Case 2011-00443. Separate  
23 Farm Tap rates were set in Case No. 2011-00513 for farm taps acquired in the initial

1 purchases. Frontier acquired the assets of Public Gas in Case 2015-00299, then again  
2 consolidated rates among all Frontier entities in Case 2017-00263. In each of these cases,  
3 I was the LLC member most familiar with utility & rate regulation, and prepared or  
4 approved most of the filing documentation, exhibits and testimony.

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

6 A. The purpose of my testimony is to explain and provide verified support for  
7 Kentucky Frontier’s proposal for a revised calculation of the Balancing Adjustment  
8 (“BA”) component of the Gas Cost Recovery (“GCR”) that Frontier files quarterly  
9 with the Commission. The revised calculation will include an *actual* balance of  
10 the account with the intent of tracking gas costs more accurately than the previous  
11 process. The timing of the revised process will alert the utility, the customers and  
12 the Commission to variances sooner, allowing the utility to adjust to possible  
13 variances before the accounts get to an extreme imbalance.

14 As set forth in Kentucky Frontier’s current tariff the GCR formula is:

15 **GCR = Expected Gas Cost (“EGC”) + Refund Adjustment (“RA”) + Actual**  
16 **Adjustment (“AA”) + BA or GCR=EGC + RA+AA+BA**

17  
18 Kentucky Frontier is now proposing a change to the gas cost recovery rate specifically  
19 defined in tariff sheets 29 and 30 of its filed tariff pursuant the Commission’s Order of  
20 April 10, 2023 in this matter. The proposed revised formula is:

21 **GCR=EGC + BA**

22 The revision to the tariff also includes the addition of a Gas Balancing Account  
23 (“GBA”) Spreadsheet to be included in the quarterly filing. The definition of the  
24 GBA is set out as a running balance and will be updated first using the actual gas  
25 purchases and sales. The GBA will show the actual balance of the gas cost account,

1 and combine the amounts previously figured through the RA + AA + BA  
2 calculation into one quarterly adjustment. The GBA spreadsheet will be filed with  
3 each quarterly GCR filing to show the monthly gas purchase costs and the gas cost  
4 recoveries. The over/under recoveries are the monthly difference between gas  
5 costs recovered from sales, compared with the purchased gas costs. The monthly  
6 over/under recoveries are added to the running, cumulative balance in the GBA  
7 spreadsheet. The Balancing Adjustment (“BA”), on a dollar per CCF basis, which  
8 compensates for any under or over collections which have occurred as a result of  
9 prior adjustments. BA will be calculated by dividing the ending GBA balance by  
10 the expected Sales volume over the next twelve-month period. The BA is  
11 calculated to amortize to zero the running balance of the GBA over the next twelve  
12 months of sales. The BA will now include the supplier RA and the AA, on a dollar  
13 per CCF basis, which reflects refunds received from suppliers during the reporting  
14 period, plus interest at the average 90-day commercial paper rate for the calendar  
15 quarter. The supplier RA will be accounted for in the new GBA, as any refunds  
16 received from suppliers during the reporting period, plus interest. In the event of  
17 any large or unusual refunds, the Company may apply to the Public Service  
18 Commission for the right to depart from the refund procedure herein set forth. The  
19 former AA, on a dollar per CCF basis, compensates for the difference between the  
20 previous quarter's expected gas cost and the actual cost of gas during that quarter.  
21 The former AA is incorporated into the BA. The combined, single BA adjustment  
22 each quarter will more quickly respond to price volatility to ensure that the GBA  
23 balance will remain within reasonable variations.

1 **Q. EXPLAIN HOW THE ADDITION OF THE GAS BALANCING ACCOUNT TO**  
2 **THE QUARTERLY FILINGS WILL IMPROVE GCR FILINGS?**

3 A. The proposed tariff revision includes a revised definition of the Balancing Adjustment,  
4 which now includes the former Refund Adjustment and Actual Adjustment. Kentucky  
5 Frontier is proposing that the BA element of the GCR formula be calculated using the  
6 actual balance of the gas balancing account. Any BA will be a single adjustment figure  
7 and will still add any AA from the last quarter and all previous quarters. This method is  
8 simpler and provides more relevant information for the customers, the Commission, and  
9 the utility. The proposal is adding the actual balance of the gas balancing account to the  
10 quarterly filings and the operation of adding this information to the calculation of the BA  
11 will provide the average customer with more information in Kentucky Frontier's  
12 quarterly GCR reports filed in the public record.

13 **Q. IN YOUR OPINION AS A PROFESSIONAL ENGINEER, MANAGER AND**  
14 **EXECUTIVE WITH 40 YEARS OF EXPERIENCE, IS THE PROPOSED**  
15 **REVISION TO THE CALCULATION OF THE GCR FAIR, JUST AND**  
16 **REASONABLE and WHY?**

17 A. Yes, because the proposed GCR calculation using a Gas Balancing Account is more like  
18 a bank account. The current system is like a bank account that receives deposits and  
19 withdraws and does not allow the account holder to see the balance. The proposed GCR  
20 calculation using the GBA will show the deposits of customer payments factored against  
21 checks to gas suppliers, and a continuous easy-to-check balance. The single Balance  
22 Adjustment will amortize this quarter's balance over one year. This simpler calculation,  
23 repeated each quarter, will continue to true-up the estimated gas costs that are a part of

1 the GCR process and will provide more information to the utility, customers and  
2 Commission with a more simple and straight-forward process.

3 **Q. ARE THERE ANY OTHER CHANGES TO THE TARIFF PROPOSED IN THIS**  
4 **PROCEEDING?**

5 A. Kentucky Frontier is also proposing a change to the 5 percent limit on gas losses to increase  
6 it to 7.5 percent and pursuant to the Commission's April 10, 2023 Order, Frontier is  
7 proposing to introducing language to explain the 7.5 percent limit on gas losses in its tariff.  
8 Frontier is also proposing a change to the organization of months into quarters to realign  
9 the months to a more standard format of calendar quarters ending March, June, September  
10 and December. Additionally, Frontier is proposing to change the units in its tariff from  
11 MCF to CCF to be consistent with the units used in its billing.

12 **Q. PLEASE GIVE A BACKGROUND OF THE GAS COST RECOVERY ISSUES**  
13 **THAT FORCED KENTUCKY FRONTIER TO SEEK REVISIONS TO ITS GAS**  
14 **COST RECOVERY QUARTERLY FILINGS.**

15 A. In November 2018, the Commission ordered Kentucky Frontier to limit gas cost recovery  
16 to 5 percent gas losses. This limit on gas losses has not been contained in Kentucky  
17 Frontier's tariff previously, and therefore, the proposed tariff revision would add language  
18 to explain the gas loss limit. Kentucky Frontier proposes a reasonable adjustment to the 5  
19 percent limit on losses to 7.5 percent due to the disproportionate penalty the limit places  
20 on Kentucky Frontier. Kentucky Frontier followed the original GCR spreadsheets  
21 provided by Commission Staff for each quarterly GCR filing. The limited gas losses pre-  
22 penalized Frontier for future L&U on future gas purchases. This handicap slowed the  
23 response to rising gas index prices and added to a negative BA. In both November 2021

1 and February 2022, each the first month of new GCR rates, Kentucky Frontier under-  
2 recovered \$150-160k in a single month.

3 This is a huge deficit for Kentucky Frontier as a relatively small utility with annual sales  
4 of 400,000 MCF. In each of these months, Kentucky Frontier lost about \$0.40 per MCF  
5 on an entire *year* of sales. Since the imposition of the 5 percent loss limit starting November  
6 2018, the total calculated value of “Excess L&U” was substantial.

7 Kentucky Frontier has under-recovered gas costs by as much as \$700,000. This deficit is  
8 significantly more than the return on investment allowed by the Commission. In several  
9 quarters with an already-high BA balance, the present GCR calculations imposed a  
10 negative AA surcharge, which made this under recovery issue worse.

11 The Commission imposed limits against Kentucky Frontier passing on the full cost of  
12 purchased gas when gas losses are deemed excessive. Lost and unaccounted-for gas or  
13 L&U can be an indicator of the condition of a gas system. Kentucky Frontier  
14 acknowledges the logic of limiting the effect on consumers, but submits that the limit  
15 should be higher, due to the size and condition of the Kentucky Frontier systems.

16 Kentucky Frontier is a conglomeration of a dozen tiny gas utilities in Eastern Kentucky,  
17 now with about 5500 customers. Starting in 2008, Kentucky Frontier acquired several gas  
18 systems of dubious operation and shaky financial condition, although most had oversight  
19 by the Commission. Most systems had gas losses over 10 percent. One utility was found  
20 to have falsified Federal records on gas losses for 20 years or more, when this system often  
21 had losses of 30-50 percent. Several had corroded steel pipe or off-spec PE pipe and bad  
22 fusion joints. All systems have benefited from Kentucky Frontier’s expertise and  
23 consistent, uniform operating practices and plans for improvement.

1 In Case No. 2011-00443, *Application of Kentucky Frontier Gas, LLC for Approval of*  
2 *Consolidation of and Adjustment of Rates, Approval of AMR Equipment and a Certificate*  
3 *of Convenience and Necessity for Installation of AMR, Pipeline Replacement Program,*  
4 *Revision of Non-Recurring Fees and Revision of Tariffs*, the general rates of the first  
5 acquired utilities were consolidated into a single Kentucky Frontier rate structure. In that  
6 case, Kentucky Frontier established its Pipeline Replacement Program (PRP) and  
7 Automated Meter Reading program (AMR) to improve systems and reduce gas  
8 losses. When the case was finalized in May 2013, Frontier immediately started to replace  
9 and upgrade gas measurement, make more extensive leak surveys and replace the leakiest  
10 segments of pipeline. In Case No. 2017-00263, *Electronic Application of Kentucky*  
11 *Frontier Gas, LLC for Alternative Rate Adjustment*, the customers of Public Gas were  
12 consolidated into Kentucky Frontier general rates and added to the PRP and AMR  
13 programs. The PRP surcharge was increased, beginning January 2018. Public Gas added  
14 more targets to the metering and pipeline replacement projects.

15 Through quarterly purchased gas adjustment filings approved by the Commission,  
16 Kentucky Frontier passed through the entire cost of purchased gas for about nine years. In  
17 Case 2017-00401 for GCR rates effective November 1, 2017, the Commission imposed a  
18 new limit on future purchased gas adjustments, reducing purchased gas cost pass-through  
19 to no more than 10 percent over Sales volume.

20 One year later, in Case No. 2018-00334, *Purchased Gas Adjustment Filing of Kentucky*  
21 *Frontier Gas, LLC*, for rates effective November 1, 2018, the Commission further limited  
22 Kentucky Frontier's gas cost recovery by reducing the limit on gas losses to 5 percent over  
23 sales volume. The Commission's October 30, 2018 Order stated that "Frontier's amended

1 application for rates effective November 1, 2018 returned to using the *standard* 5 percent  
2 L&U limit in the calculation of its EGC rate”.

3 This change was not voluntary. Kentucky Frontier’s tariff has no such language for a 5  
4 percent limit. This decision was not supported by any actual L&U history or by Kentucky  
5 Frontier achieving a new threshold. Moreover, there is no statute or Commission rule that  
6 limits gas cost recovery or that defines a “standard” limit to losses of 5 percent, or any such  
7 parameter.

8 **Q IN YOUR OPINION AS A PROFESSIONAL ENGINEER, MANAGER AND**  
9 **EXECUTIVE WITH 40 YEARS OF EXPERIENCE, IS THE PROPOSED**  
10 **REVISION TO THE CALCULATION OF THE GCR FROM A 5% LIMITER TO**  
11 **A 7.5% LIMITER FAIR, JUST AND REASONABLE and WHY?**

12 Yes, because proportionally, Kentucky Frontier is a small gas utility in customer count,  
13 compared with the five large local distribution companies (“LDC”) in  
14 Kentucky. However, Kentucky Frontier has about 5500 customers and is larger than most  
15 municipal gas utilities and the small LDCs. As compared with most other gas utilities in  
16 Kentucky, Kentucky Frontier serves extremely rural customers. By far, the largest  
17 community is Jackson, Kentucky, with about 500 meters. Most Kentucky Frontier  
18 customers live in small rural, unincorporated communities, crossroads and clusters.

19 Kentucky Frontier operates about 360 miles of pipeline to serve 4900 utility customers (the  
20 rest are farm taps). Customer density is about 15 meters per mile of pipe. The four large  
21 LDCs and others that serve primarily urban-suburban communities will typically serve 50-  
22 60 meters per mile of pipe. With similar vintages and conditions of pipe, but only 25-30

1 percent of the customer density, losses on Kentucky Frontier rural pipelines should be  
2 statistically 3-4 times higher than urban systems, based on customer density.

3 Kentucky Frontier has no large industrial users to dilute the effects of gas losses. The two  
4 largest customers are a regional hospital and a prison, each of which has the load of one  
5 typical urban school. There is no significant user of process or industrial heat, so nearly  
6 the entire Kentucky Frontier load is heat-sensitive. The summer load gets down near 200  
7 Mcf per day, or 1/2000<sup>th</sup> of annual volume. Any gas loss/leakage/theft of even small  
8 volumes can cause 20-30 percent L&U in summer months.

9 When Kentucky Frontier started, the former Belfry Gas was leaking 30-50 Mcf per day.  
10 Kentucky Frontier has replaced pipe in the former Belfry Gas system and with other  
11 maintenance has largely reduced the amount of L&U in that system.

12 However, Frontier is at a disadvantage compared to larger urban systems in this area. The  
13 Kentucky metro systems with industrial customers will move 10-20 times higher gas  
14 volume per mile of pipe. The same exact leaking section of pipe could generate 7 percent  
15 losses on the Frontier system, but less than ½ percent volumetric loss on a large urban  
16 system in Kentucky, with much larger sales volume per mile.

17 Kentucky Frontier to date has collected and spent about \$500,000 in its AMR program, to  
18 refurbish-test-replace meters and add electronic automated meter reading. The meter  
19 program will be close to completion in 2023. The PRP surcharge has raised and invested  
20 \$1.6M to replace miles of marginal pipeline, to positively odorize all systems to find leaks,  
21 and effect several improved technologies to find & fix leaks and un-locatable  
22 pipelines. Nearly all Kentucky Frontier pipelines are mapped in the Geographical  
23 Information System (“GIS”) database along with many DOT records, to keep better track

1 of operating history. Kentucky Frontier has made steady progress in finding and reducing  
2 gas leaks and losses. However, the systems Kentucky Frontier acquired and combined to  
3 make the current Kentucky Frontier system were in subpar shape and more work is needed  
4 to get the system to a point where Kentucky Frontier could have less than 5 percent L&U.  
5 The long rural pipelines, low customer density and low volume usage may make 5 percent  
6 losses unachievable.

7 **Q. HAS THE UNDER RECOVERY OF \$700,000 BEEN CORRECTED?**

8 **A.** Yes, but only due to the wild volatility in the gas markets that happened to go the right way  
9 for Frontier.

10 **Q. HOW DOES THE DRASTIC SWING IN GAS COST OVER THE LAST 6**  
11 **MONTHS PUT FRONTIER GAS AT A DISADVANTAGE USING THE**  
12 **STANDARD GCR PROCEDURE?**

13 **A.** This past winter was a perfect example of why we need a more nimble GCR. The rates  
14 for November, December and January as approved in Case No. 2022-00327, were based  
15 on calculations made in late September. At the time, the TCO gas index was \$8 and had  
16 been there all summer, compared with \$3 in the same months in 2021 and \$1.50 in 2020.  
17 Clearly, something was amiss with the gas markets.

18 Kentucky Frontier had just spent several weeks estimating the actual gas cost balance for  
19 the first time, since that was never part of the GCR process. We determined the GBA  
20 was at least \$600,000 under-recovered, after continually worsening over a 2-year period,  
21 with a low of \$741,000 short. In the preparation of Case No. 2022-00327, Frontier was  
22 focused on correcting the massive under-recovery and making sure not to under-estimate  
23 EGC for the winter quarter Nov-Dec-Jan with *half of annual sales* volume.

1 Then very soon after the GCR filing in late September, came the sudden obliteration of  
2 the Eastern US gas markets. October TCO index went under \$5, then November to \$4.  
3 Kentucky Frontier over-recovered nicely in November-December, and we projected  
4 going positive in 1Q23 for the first time since November 2020. Frontier proposed to  
5 lower the rates with subsequent filings in Case No. 2022-00428 and Case No. 2022-  
6 00434 and Case No. 2023-00049 as gas indexes stayed low. The February TCO index  
7 was \$2.48, which was inconceivable six months earlier.

8 The proposed rate reductions were rejected by the Commission. For February-March-  
9 April, Frontier was stuck with charging the rates from Case No. 2022-00327 based on  
10 record high EGC. We now estimate that, after the April billing cycle, the GBA balance is  
11 now *over*-recovered by almost \$600,000. This was a \$1.3 million swing since  
12 September.

13 While other similar utilities are able to adjust to absorb some of the volatility of the market  
14 to stay financially viable, it is inconceivable that over a single heating season, Frontier has  
15 swung from \$740k Red to \$670k Black. The wild swing in cash flow is an intolerable risk  
16 for a small company with 5000 families depending on us. We need to be able to react more  
17 quickly to changing markets.

18 **Q. WHY IS KENTUCKY FRONTIER WORRIED ABOUT AN OVER RECOVERY?**

19 **A.** Over-recoveries are expected, but the present method was slow to react and allowed  
20 massive swings between under and over. The large AA for last winter's over-recovery  
21 will apply during the summer, with low usage and traditionally negative cash flow.  
22 These swings in revenues are difficult for a small utility to manage, made worse by a  
23 laggard rate mechanism.

1 **Q. HOW WILL THE PROPOSED CHANGE IN QUARTERLY FILINGS PREVENT**  
2 **AN UNDER RECOVERY OR OVER RECOVERY IN A VOLATILE MARKET?**

3 A. The GBA method won't prevent over- or under-recovery in volatile markets. But keeping  
4 and disclosing the actual GBA balance will allow quicker and more accurate rate  
5 adjustments. This method will also better inform the Commission, the Company and its  
6 customers of the current status of GCR and a better prediction of future rate trends.

7 **Q. IN YOUR OPINION AS A PROFESSIONAL ENGINEER, MANAGER AND**  
8 **EXECUTIVE WITH 40 YEARS OF EXPERIENCE, IS THE PROPOSED**  
9 **REVISION TO THE CALCULATION OF THE GCR TO CHANGE THE**  
10 **MONTHS OF THE QUARTERS AND THE UNITS OF REFERENCE TO CCF**  
11 **TO BE CONSISTENT WITH BILLING FAIR, JUST AND REASONABLE and**  
12 **WHY?**

13 A. Yes, because these timing and units changes are administrative and have no impact to the  
14 substantive information supplied to the Commission through the GCR.

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

16 A. Yes.