COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

| ELECTRONIC INVESTIGATION OF JURISDICTIONAL |) | |
|---|---|------------|
| STATUS OF EAST KENTUCKY MIDSTREAM, LLC |) | CASE NO. |
| AND OF ITS COMPLAINCE WITH KRS CHAPTER 278, |) | 2022-00238 |
| 807 KAR CHAPTER 005, AND 49 CFR PARTS 191 AND 192 |) | |

DIRECT TESTIMONY OF STEVE SHUTE ON BEHALF OF KENTUCKY FRONTIER GAS, LLC

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

| IN | THE | MA | TTER | OF. |
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| ELECTRONIC INVESTIGATION STATUS OF EAST KENTUCK AND OF ITS COMPLIANCE WAS KAR CHAPTER 005, AND | Y MIDSTREAM, LLC WITH KRS CHAPTER 278, |) | CASE NO. 2022-00238 |
|--|---|---|------------------------|
| VERIFICATI | ION OF STEVEN SHUTE | X | |
| COMMONWEALTH OF KENTUCKY |) | | Λ |
| |) | | |

StevenShute, 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 day of October, 2022, by Steve Shute.

Notary Commission No. KYNR 27914

Commission expiration: 5-27-2025



- 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
- am registered as a Professional Engineer in Colorado and Utah. I've worked as a natural
- 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
- 10,000 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
- now sole member and owner. I serve as Managing Member of Frontier with oversight over
- 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 5000 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
- 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
- Farm Tap rates were set in Case No. 2011-00513 for farm taps acquired in the initial

purchases. Frontier acquired the assets of Public Gas in Case 2015-00299, then again consolidated rates among all Frontier entities in Case 2017-00263. In each of these cases,

I was the LLC member most familiar with utility & rate regulation, and prepared or approved most of the filing documentation, exhibits and testimony.

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

- A. The purpose of my testimony in this proceeding is to explain the relationship of Kentucky
 Frontier with the former Jefferson Gas pipeline system now operated by East Kentucky
 Midstream, LLC ("EKM") and its effect on the customers of Kentucky Frontier.
- 9 Q. PLEASE GIVE A BACKGROUND OF THE RELATIONSHIP BETWEEN
 10 JEFFERSON GAS, PUBLIC GAS AND KENTUCKY FRONTIER.

A.

- We have spent more than 10 years studying the Jefferson Gas and Public Gas systems for purchase or operation (see below). From our research, the Jefferson Gas and Public Gas have pipeline roots that go back 100 years. The two entities were placed together and operated by a family group from Ohio ca 1980. Jefferson Gas connected segments of pipelines built by Capitol Oil (the C-Line) and Ashland Oil (A-1, A-2 etc.) and others. The owners also had some oil & gas production in the area, and intended Jefferson Gas to become a regional gas pipeline network to serve local customers and take locally produced gas to interstate pipeline markets. Public Gas assumed the customers of an earlier distribution entity in Jackson that dated back to the 1950s, and added customers over the years along the Jefferson pipelines. Jefferson Gas and Public Gas were affiliates run almost seamlessly as a single system, sharing operating employees.
 - By early 2011, the ownership group had sold its wells due to declining production and reduced gas volume on Jefferson Gas. The group decided to split up the gas network and

Public and made a reasonable offer. In March 2012, the Public Gas utility was sold to Gas Natural (formerly Energy West), a Cleveland-based utility in PSC Case No. 2012-00029. Jefferson Gas held onto 200 of the larger volume "farm taps" along the Jefferson mains. By 2014, Gas Natural had second thoughts and contacted Frontier about buying the Public network. Frontier eventually purchased the assets of Public Gas in December 2015.

Q. HOW DID THAT GO?

A.

Public Gas was a great addition for Frontier. It increased our customer base about 50% and added several more counties to our footprint. Most Public Gas customers are situated near the Mountain Parkway, where Frontier serves several communities, and that corridor seems to have stronger prospects for long-term financial viability than more remote former coal mining towns. Frontier had also worked to acquire Elam Utility in West Liberty, which fits into Frontier's operational footprint, but that purchase was unsuccessful. Public Gas transferred only a handful of relatively new operating employees, but Frontier could rely on more experienced hands at Jefferson to lend some history and perspective.

Q. WHAT HAPPENED TO JEFFERSON GAS?

A. We didn't see much change immediately. After Frontier made the offer to purchase Public Gas assets, Jefferson announced it would raise its transport rate to Frontier from \$1.50 to \$2.00 per MCF. This seemed quite high compared with charges on other pipelines including gas from the Gulf, but we weren't terribly concerned. Public Gas had always come under PSC jurisdiction and all retail gas sales along Jefferson were under PSC tariffs for Public utility customers or the Jefferson farm taps.

Elam Utility imploded in 2014 over unpaid gas bills and the town of West Liberty took it over. About the same time, Columbia announced plans to abandon the KZ pipeline, by then a low-pressure distribution line supplying West Liberty, Frenchburg (Delta Gas) and some farm taps. Jefferson Gas took on the KZ line, which diluted the Frontier / Public Gas sales volume to about 60% of Jefferson Gas' sales to utility customers.

A.

In 2015, the reason Jefferson Gas gave for the rate increase was "Jefferson's dependence on major market sources for gas supply." [Case 2015-00299, Frontier response to Staff DR #1.3.b.] At that time, Frontier believed that Jefferson Gas was no longer primarily a gathering system, but was delivering gas from Columbia Gulf Transmission much of the year. In January 2018, Jefferson further raised the transport fee to \$3.25 /DTh (\$3.63 per MCF) with no notice or explanation.

In October 2020, completely out of the blue, Jefferson Gas informed Frontier that it was in desperate financial condition. The owners had considered shutting down the system (1 month before winter, unannounced), but instead had put the system up for sale. Further, as an emergency measure to survive through winter, the transportation charge would be raised to \$5.75 per DTh (\$6.43 per MCF). This figure is 4 times the rate from 5 years earlier, as Frontier was evaluating the economics to buy Public Gas.

O. DID FRONTIER CONSIDER BUYING JEFFERSON GAS?

The shocking phone call on rates from Jefferson Gas in October 2020, was followed up by a Mergers & Acquisitions specialist, who offered the Jefferson Gas assets for sale to Frontier. Over winter 2020-21, Frontier evaluated the purchase of parts of the Jefferson Gas system. The A-1, A-2 and C-line segments are about 80 miles of the 235-mile system offered in the sales documents. These segments supply virtually all of Frontier's former

Public Gas customers, and could potentially tie Public Gas' systems together with other Frontier systems. The other six Jefferson segments had little or no strategic value to Frontier, and only a handful of Frontier farm tap customers. Frontier had several major concerns:

- a. The marketing literature described the system: "Jefferson Gas LLC owns and operates a 235-mile, low-pressure natural gas *transmission* line in eastern Kentucky".
- b. But out of 235 miles of *transmission* pipeline offered, Jefferson designated only 44 miles of A-4 and C-line as "Transmission" lines under Federal gas pipeline safety regulations at 49 CFR Part 192 et.al. Years of annual reports to DOT had pipeline details, leaks and gas losses on only 2 random, non-adjacent segments.
- c. Although it seems that the Jefferson Gas system appeared to Frontier to be a transmission line as that term is defined in 49 CFR Part 192, Jefferson Gas had designated all other segments as "Gathering" lines not subject to jurisdiction of USDOT PHMSA or the Kentucky PSC.
- d. Frontier believes that the "gathering" label is highly debatable. In the sales literature that was presented to Frontier, the system was described as "235 miles of contiguous interconnected" pipelines. Segments C and A-4 are interconnected completely with all other segments: same pressures, same gas sources, same pipe sizes, pushing gas back & forth between segments, depending on the season. "Gathering" seemed to apply only to non-owned wellhead gathering systems run by independent producers that feed into Jefferson Gas in various locations, usually delineated by a custody transfer meter and sometimes a compressor operated by the producer.

e. Decades ago, Jefferson had gathered & transported gas to the various distribution sales points, then sold excess gas to interstate pipelines. But now, Jefferson Gas seemed mostly a *transmission* system supplying distribution systems and customers, taking gas off Columbia Gulf most months to adequately supply customers. Some sections operated at 50 psi or less, which is more like a *distribution* system.

- f. In appeared to Frontier at the time it was contemplating purchasing Jefferson Gas that the lines were mostly in Fair to Very Poor condition.
- g. Documents & maps & details were impossible to discern to the extent needed.
 - h. Frontier believed that if Frontier purchased and operated these segments as Frontier utility assets, the Commission would almost certainly deem them DOT-jurisdictional under 49 CFR Part 192 et.al., as administered by Kentucky PSC. Frontier was concerned about the replacement cost, even if over many years, would be \$15-20 million, far beyond the value of Public Gas.
- Frontier has no expertise or business interest in producing, gathering or exporting gas.

 There was no compelling business case for the investment and risk required to buy parts of

 Jefferson to incorporate into Frontier. Instead, we considered operating the middle section
 as a separate entity, a common carrier to supply Public Gas customers and possibly West

 Liberty. In January, Jefferson Gas told us that the A4 and A5 segments were sold to a

Q. WHEN DID EKM PURCHASE JEFFERSON GAS?

producer, which had no effect on Frontier.

A. EKM purchased all assets of Jefferson Gas with an effective date of March 1, 2021.

Frontier first learned of this by surprise on March 4, when several people from EKM came

to our office, informing us of the entire turnover. EKM strongly suggested that Frontier should operate the Jefferson system under contract with them.

Q. SINCE EKM PURCHASED JEFFERSON GAS, WHAT HAS BEEN THE EFFECT

ON CUSTOMERS?

gas cost.

A.

- Gas costs from EKM exceed any credible industry standard. The last Jefferson Gas supply contract ran through April 30, 2021 and was replaced by a contract with EKM. The terms offered were fixed, with no negotiation. EKM adopted Jefferson Gas' "emergency" rates, which Frontier hadn't expected to go past winter 2020-21. Compared with our estimate of a reasonable cost-based charge, these "emergency" rates from EKM added approximately \$320,000 to gas cost from May 2021 to September 2022.
- EKM then added other charges not seen from Jefferson Gas, such as a fixed 12% LAUF (Lost And Unaccounted For) that Frontier found wasn't being charged to West Liberty or the nearby state prison. This LAUF has added approximately \$80,000 to gas cost.

The contracts specify that Jefferson / EKM will purchase all locally-produced gas, and require Frontier to first take that Local gas through its meters, at TCO Appalachian Index plus transport fees. If Local gas wasn't sufficient to supply Frontier, then supplemental gas was supplied off Columbia at Means Compressor at higher cost. In April 2022, Frontier discovered that EKM had mis-represented the TCO Appalachian Index since inception. EKM had charged Frontier for 70-85% FERC gas from Columbia Means (see AG DR1.9 in this Case, Interstate Gas Allocated to Frontier). In all but the coldest winter months this is physically impossible, since Local gas production is far in excess of Frontier usage, and easily supplies the Public Gas volume. This improper substitution added about \$59,000 to

| 1 | These charges for former Public Gas customers simply dwarf the gas costs for all other |
|---|--|
| 2 | customers in the Frontier footprint. For one-third of Frontier's meters and 26% of sales |
| 3 | volume, the gas cost off EKM was about \$12.70 per MCF, which is more than \$6.30 paid |
| 4 | for the rest of Frontier. |

A.

The EKM transport fees don't just affect the Frontiers customers of former Public Gas. All gas costs are shared equally among all 5000 Frontier utility customers. This unregulated gas cost has a profound effect on every utility customer. After Jefferson Gas levied the "emergency" charges in October 2020, the cost of gas from Jefferson / EKM *has exceeded the gross revenue* from former Public Gas customers, including Frontier's non-gas margin. The other two-thirds of Frontier customers had to subsidize this disparity.

Frontier paid EKM fees of about \$800,000 since May 2021. When spread over 400,000 MCF in all Frontier utility sales, the EKM fees added approximately \$2.00 to every MCF sold by Frontier throughout its entire footprint. A typical Frontier customer near Pikeville or Prestonsburg uses about 60 MCF per year. The EKM fees cost approximately \$120 per year or \$10 per month to these families, with no discernible benefit.

16 Q. DOES KENTUCKY FRONTIER HAVE ANY OTHER SUPPLIERS IT CAN 17 PURCHASE NATURAL GAS FROM TO SERVE THE FORMER PUBLIC GAS 18 CUSTOMERS?

No. There is no other feasible gas supply to former Public Gas customers that were always supplied by the sister company Jefferson Gas. As described here, the Jefferson Gas and Public Gas systems evolved together, intertwined by shared ownership, operating employees and gas customers. Frontier / Public receives gas from EKM / Jefferson in more than 500 separate, metered locations. Frontier has 8 "master meter" deliveries off EKM to

1 serve distribution systems in Jackson, Campton and others with about 1100 meters. (See 2 EKM response to Staff DR1.04.b Sales and Purchase Points.) The other 500 meters are 3 considered Farm Taps off Jefferson pipelines scattered all over, mostly along Lines C, A-4 1 and A-2. 5 EKM testified that Frontier could buy Local produced gas. But EKM has tied up all Local 6 gas nearby Jefferson. The Jackson system has wells and producers all around, and is 7 supplied by unmapped lines apparently operated by EKM that are tied to gathering systems. Even if EKM had not tied up this Local gas with contracts, Frontier Jackson couldn't take 8 9 enough in the summer to entice a producer to supply gas year-round, and would still have 10 to supplement off EKM in the colder months. EKM asserted that there are other pipelines in Eastern Kentucky. There are several FERC 11 12 interstate pipelines on the far ends of Jefferson near Lexington and Paintsville, but nothing 13 close. Any FERC pipeline tap (anywhere) would be a cost of approximately \$1 million, 14 then a connection to Campton & Jackson from Columbia would be 50 miles of 6-inch pipe 15 at a minimum of \$240,000 per mile, or about \$13 million total. 16 Frontier evaluated the alternatives of Compressed Natural Gas (CNG) or Liquefied Natural 17 Gas (LNG); and including truck transport, net gas costs were similar to EKM's pipeline 18 charges. Jackson is large enough to be marginally feasible, but building separate CNG or 19 LNG facilities for 7 other separate, much smaller master meter supply points is not 20 remotely feasible. 21 For all the alternatives to Jefferson Gas pipeline, supplying 500 customers in Jackson might 22 be possible, but likely not the other master meter systems. The farm taps can only be served

| 1 | | by pipeline. Roughly 1100 utility and farm tap customers could not be supplied without |
|----|----|--|
| 2 | | Jefferson Gas/EKM. |
| 3 | | In the Formal Conference on October 14, EKM's attorney asked me if we knew that |
| 4 | | Jefferson was the only supplier for Public Gas, when we bought it. I quickly replied "sure". |
| 5 | | We were a little concerned at the time, when Jefferson Gas was charging Gas Natural \$1.50 |
| 6 | | per MCF then moved up to \$2.00 for Frontier. Now at nearly \$8 per MCF being charged |
| 7 | | by EKM, that's a completely different story. |
| 8 | Q. | ARE YOU FAMILIAR WITH RESPONSES TO DATA REQUESTS PROVIDED |
| 9 | | BY EKM IN THIS PROCEEDING? SPECIFICALLY, THE RESPONSES THAT |
| 10 | | PROVIDE INFORMATION REGARDING THE AMOUNT OF GAS SOLD TO |
| 11 | | KENTUCKY FRONTIER AND THE SOURCE OF THAT GAS SUPPLY? |
| 12 | A. | Yes I am familiar with those responses provided by EKM. |
| 13 | Q. | PLEASE DESCRIBE THE SIGNIFICANCE OF THOSE RESPONSES. |
| 14 | A. | The EKM response to AG DR1.08.c was particularly striking. Back in the day, well before |
| 15 | | Frontier was involved, Jefferson Gas had reportedly moved around 5 million cubic feet per |
| 16 | | day of gas from producers to pipeline markets. That was arguably a "Gathering" system, |
| 17 | | as annually reported to DOT PHMSA. |
| 18 | | But the figures on 8.c. show something completely different. The table lists various |
| 19 | | producers that gather gas and deliver it to EKM/Jefferson. The top producer Troublesome |
| 20 | | Creek is the main source for Jackson, and over 16 months (Apr21-Jul22) produced about |
| 21 | | 200 mcfd into EKM for Frontier. Another 7 producers made 20-100 mcfd, which isn't |
| 22 | | much. For perspective, the 2000s fracking boom brought in 10,000 wells near our Pinedale |

| 23 | FRONTIER FOR NATURAL GAS THAT DOES NOT GO THROUGH A |
|--------------|---|
| 22 Q. | ACCORDING TO BILLING RECORDS, IS EKM CHARGING KENTUCKY |
| 21 | PHMSA jurisdiction. |
| 20 | sections of Frontier should now be deemed "Gathering" not subject to PSC or |
| 19 | consolidated under the Frontier utility. It would be a challenge to argue that large |
| 18 | c. All of these entities have been regulated by PSC for decades, and are now |
| 17 | pipelines are minimal or halted; but |
| 16 | from local production over the summer, enough that deliveries from FERC |
| 15 | Sigma, Cow Creek, EKU, Belfry and Auxier systems all take much of their supply |
| 14 | up Frontier, with about a dozen producers scattered throughout. The former BTU, |
| 13 | b. The EKM system supply closely resembles several of the systems that now make |
| 12 | FERC gas can somehow revert to unregulated "Gathering" gas; |
| 11 | a. If almost half the supply was off a FERC pipeline, it does not seem logical that |
| 10 | significant to Frontier for several reasons: |
| 9 | Overall in this period, EKM got 42% of its supply from a FERC pipeline. This split is |
| 8 | about 75,000 DTh to Delta at Frenchburg, which is tough to supply from Local gas. |
| 7 | Energy, presumably off Columbia at Means Compressor. A small fraction of this was |
| 6 | In the same period, EKM took 431,000 DTh from FERC pipelines through Southern |
| 5 | DTh. |
| 4 | others produced minimal volumes. The total production for 16 months was about 589,000 |
| 3 | Three producers were only on Line A-3 which is largely irrelevant to Frontier, and 17 |
| 2 | and most single wells still produce at least 200 mcfd like the entire Troublesome system. |
| 1 | WY system. Some of these deep wells came in a 20 million cuft per day (not 16 months), |

| 1 | | KENTUCKY FRONTIER METER AND IS NOT SUPPLIED TO A KENTUCKY |
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| 2 | | FRONTIER CUSTOMER? |
| 3 | A. | See AG DR1.8.c. in this Case, KY Frontier Gas TCO Meters Means & Van Lear. After |
| 4 | | the billing issue on improper allocation of Local gas was raised (see above), EKM initiated |
| 5 | | something completely new. For warmer months Oct21 and Apr-Jul22 where Local gas is |
| 6 | | more than Frontier can use, EKM sold excess gas off the system and charged Frontier a |
| 7 | | transportation fee for that excess gas. |
| 8 | | This export charge isn't similarly allocated among the other wholesale users West Liberty |
| 9 | | or Delta Frenchburg. This isn't mentioned anywhere in any contract. This gas doesn't |
| 10 | | flow to "Frontier's City Gate and Farm Tap customers" per the contract. Through July |
| 11 | | 2022, these alleged "sales" totaled 60,000 DTh and \$370,000 above the charges for gas |
| 12 | | actually delivered. |
| 13 | Q. | IN THE RESPONSES TO DATA REQUESTS, EKM NOTED THAT IT CHARGES |
| 14 | | KENTUCKY FRONTIER FOR LAUF GAS, BUT DOES NOT CHARGE LAUF TO |
| 15 | | ANY OTHER CUSTOMER. WHAT IS LAUF AND WHY IS THIS SIGNIFICANT? |
| 16 | A. | LAUF is Lost and Unaccounted-For gas. Under the new EKM contract starting May 2021, |
| 17 | | "Frontier shall pay, on a monthly basis, its proportionate share of EKM's LAUF on the |
| 18 | | actual segments of the Pipeline Assets utilized in the receipt and delivery of natural gas |
| 19 | | sales and transportation services to Frontier's customers". The maximum allowable |
| 20 | | amount is 15% of Frontier's volume, which is supposed to vary depending on actual losses, |
| 21 | | which change seasonally. |
| 22 | | Frontier suspects that most of the claimed LAUF is in two categories. First, in significant |
| 23 | | gas leakage on the ancient KZ-East pipeline to West Liberty; but that line supplies only a |

- part of Frontier's needs, and only in deep winter. The other "loss" is un-metered
- 2 compressor fuel at several locations, only one of which (Hazel Green) benefits Frontier
- 3 customers.

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- 4 Since inception, EKM has charged precisely 12% LAUF, each month, summer or winter.
- 5 This has added approximately \$80,000 to gas cost in the EKM era.
- 6 LAUF was not charged by Jefferson Gas, and is not charged to West Liberty municipal.
- Frontier takes more than half of all wholesale volumes off EKM but has the worst rate
- 8 structure, which is non-negotiable. When asked about this disparity, EKM simply responds
- 9 "well, you can pass these costs on to your customers".

10 Q. PLEASE GIVE SOME PERSPECTIVE ON THE AMOUNT EKM CHARGES.

- A. Frontier receives about 55% of all utility gas supply off the TCE (Columbia) P-20 and
- Diversified (former EQT) KWV pipelines. These pipelines gather, process and compress
- gas from many production sources, for delivery to interstate pipelines. The pipelines are
- at full capacity, so gas movement is subject to firm transportation charges and marketing
- 15 fees from those who control capacity. Most gas deliveries to Frontier are priced off the
- 16 TCO Appalachian Index. Over the past year, gas off these pipelines had an added cost of
- about \$1.00 per MCF over TCO index. Most local producers are happy to receive full TCO
- index without a gathering fee, and add little or no margin over TCO.
- 19 At the Formal Conference held on October 14, EKM invited witness Bill Barr to speak
- about gathering pipelines. Mr. Barr runs a production company and is the executive of the
- 21 Kentucky Oil & Gas Association. Mr. Barr testified that a typical gathering pipeline would
- charge an unrelated producer a modest fee for collecting the gas from wells and

- 1 transporting it to a pipeline market. These charges vary with many factors, but 50¢ per
- 2 MCF would be a typical charge, up to \$1.50 in some cases.
- 3 EKM charged Frontier \$7.71 per MCF over TCO from May 2021 to July 2022. EKM also
- 4 attributed charges to Frontier for unused Local gas exported at Van Lear in the summer.
- 5 Frontier rejects these charges as completely outside any contract or industry practice. If
- 6 litigated successfully, the total EKM charges for this period would be \$11.02 per MCF
- 7 over TCO index, where \$1.00 is enough for most pipelines.

8 Q. HOW DOES THIS COMPARE WITH FRONTIER'S CHARGES?

- 9 A. We don't have all the EKM numbers, but based on estimates, here is a comparison:
- a. Frontier has about \$8 million of investment at risk, EKM less than \$1.5M;
- b. Frontier has 12 operators, 5 office staff and 4 outside consultants; EKM has 4 field
- workers and a part-time admin worker;
- 13 c. Frontier's average non-gas margin is \$4.00 per MCF above gas cost; EKM charged
- 14 Frontier \$7.71.
- Based on our estimate of EKM operating costs and an ARF-style rate model, a "fair and
- reasonable" EKM margin is under \$2.50 per MCF.
- 17 Q. AT THE FORMAL CONFERENCE HELD ON OCTOBER 14, 2022, EKM
- 18 STATED THAT THERE WAS AN AGREEMENT BETWEEN JEFFERSON GAS
- 19 AND NATURAL GAS REGARDING FARM TAP REQUESTS. BEFORE THE
- FORMAL CONFERENCE, WERE YOU AWARE OF ANY SUCH AGREEMENT?
- 21 A. In 10 years of researching Jefferson Gas & Public Gas including hundreds of conversations
- with a dozen people and thousands of words, that was the first we'd ever heard of any such
- agreement. Frontier bought the assets of Public Gas and didn't receive or assume any such

| 1 | | agreements or contracts, but someone, somewhere should have mentioned this arrangement |
|----|----|--|
| 2 | | if it existed. |
| 3 | Q. | WHAT WAS CONVEYED WHEN KENTUCKY FRONTIER PURCHASED THE |
| 4 | | ASSETS OF PUBLIC GAS? |
| 5 | A. | As detailed above and in the EKM response to Staff DR1.04.b, Sales and Purchase Points; |
| 6 | | Frontier has 8 master meter-style deliveries off EKM to serve distribution systems in |
| 7 | | Jackson, Campton and others. These systems serve about 1100 meters and were built by |
| 8 | | former Public Gas, then conveyed to Frontier in December 2015. These systems total about |
| 9 | | 46 miles of main and 1800 service lines, both steel and PE pipe, which are included in the |
| 10 | | annual F7100 reports to PHMSA as jurisdictional gas distribution facilities. |
| 11 | | The other 500 meters conveyed by Public Gas to Frontier are considered Farm Taps off |
| 12 | | Jefferson Gas pipelines. These are scattered all over, mostly along Lines C, A-1 and A-2. |
| 13 | | Public Gas conveyed any customer billing and records they had. These farm tap assets |
| 14 | | were purported to include only the meter sets, described by Customer-Account-Address- |
| 15 | | MeterNo and possibly a Lat-Long position. Any lines downstream of the meter are the |
| 16 | | property of the customer. By definition, all "farm taps" were represented by Public Gas to |
| 17 | | be located on Jefferson-operated pipelines. |
| 18 | Q. | DOES KENTUCKY FRONTIER OWN ANY PIPELINES IN THE AREAS WHERE |
| 19 | | IT SERVES FORMER PUBLIC GAS CUSTOMERS? |
| 20 | A. | Frontier operates the distribution pipelines serving about 1100 customers downstream of |
| 21 | | the master meter style deliveries like Jackson and Campton, see above. |
| 22 | | For about 500 farm taps, Public Gas conveyed the meter set, but no underground pipeline |
| 23 | | up- or downstream. From customer records, Public Gas and Jefferson Gas treated each |

farm tap meter as a custody transfer point. Each month, Public Gas read the meter and shared that with Jefferson Gas, which then billed Public Gas for the usage since the last reading. From DOT Part 192 definitions, Frontier's responsibility does not extend upstream of the meter.

When Frontier assumed these farm taps, we assumed they were tapped onto the Jefferson Gas mainlines shown on the maps. That's the standard we've seen on the other 500 farm taps we operate on other systems since 2008. After a few years of operating farm taps on Jefferson Gas pipelines, we now find some are connected to separate distribution systems stemming quite a distance from the pipelines.

Q. WHAT WOULD YOU DO ABOUT EKM'S OLD PIPELINES?

A.

At the Formal Conference held on October 14, 2022, EKM witnesses expressed extreme concern that any DOT or PSC jurisdiction would immediately require replacement of their old pipelines, that don't meet DOT standards. EKM would be forced out of business, which would maroon 2000 gas customers and many producing wells.

I am an unintended expert on operating old gas pipelines. In a former job, I was Manager of Corrosion Control for a large utility with 15,000 miles of steel pipelines, all under DOT PHMSA jurisdiction. We operated over 5,000 miles that preceded corrosion control technology or DOT regulations, so were subject to corrosion and leakage. I'm a NACE member since 1982, but these lines were uncoated steel and way past the point of effective cathodic protection. As Frontier assembled its various pieces, we inherited several similar systems that were severely corroded and leaking, some with falsified DOT records that masked the extent of losses.

- In each case, total replacement was never an option. The 500 customers that were under
- Belfry Gas cannot afford to pay \$3 million to replace their old pipelines in a year. Instead,
- in my former utility as well as Belfry, we set up a system of triage, well before PHMSA
- 4 required Distribution Integrity Management Plans:
- 5 a. Leak survey the suspect systems at or above the level required by DOT Part 192;
- 6 b. Triage the leak surveys to target the worst leakage sections for work;
- 7 c. Replace the rotten pipe in sections, not just the few feet that are leaking, since there
- 8 are likely unseen, nearby leaks; we rarely installed less than a full roll (500 ft) of pipe;
- 9 d. Repeat annually; and respond immediately to any emergency leaks that threaten
- people or property.
- 11 EKM has a challenge, with big sections of pipeline in poor condition. But that cannot rule
- out DOT jurisdiction over pipeline safety, when utilities and transmission systems have
- dealt with DOT regulations on similar and worse systems, for 50 years. And EKM pipeline
- replacements shouldn't be prepaid by Frontier and others, through exorbitant charges.

15 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

16 A. Yes.