

**BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

**IN THE MATTER OF THE APPLICATION)
OF ATMOS ENERGY CORPORATION FOR) 25-ATMG-278-TAR
APPROVAL OF THE COMMISSION OF THE) DOCKET NO. 25-ATMG-XXX-RTS
FOURTH SYSTEM INTEGRITY PROGRAM)
("SIP") RATE CHANGE)**

DIRECT TESTIMONY OF REBECCA K. HOLBROOK

JANUARY 15, 2025

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DIRECT TESTIMONY OF REBECCA K. HOLBROOK

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Rebecca (“Becca”) K. Holbrook. My business address is 25090 West 110th Terrace, Olathe, KS 66061.

Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL BACKGROUND.

A. I earned a Bachelor of Science degree in Mechanical Engineering from University of Missouri – Columbia in 2006. I am a Professional Engineer registered in the states of Kansas and Missouri. I began my career in the gas utility business with Missouri Gas Energy in Lee’s Summit, Missouri. My first position was as an Engineer. I have held various engineering positions throughout my career. I began working for Atmos Energy (“Atmos Energy” or “Company”) in 2020 as a Manager of Engineering Services in Olathe, Kansas.

Q. WHAT ARE YOUR DUTIES IN YOUR CURRENT ROLE?

A. I am responsible for and have oversight of Engineering in Kansas for the Colorado-Kansas Division. My duties include supervision and review of all engineering designs for the state. It is my responsibility to ensure that Atmos Energy’s pipes, regulators, and other facilities are designed to all applicable codes and regulations to enable the Company to continue to provide safe and reliable service to our customers throughout our authorized service territory.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KANSAS CORPORATION COMMISSION (“KCC”)?

A. Yes.

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

2 A. The purpose of my testimony is to provide an analysis demonstrating that it is
3 equally or more cost effective to replace the relevant modern (post-1983)
4 polyethylene segments of pipe rather than uprating the existing pipe in the projects
5 reflected in this filing. It is also to confirm that the costs included in this filing
6 regarding sewer cross bore prevention are only those costs necessary to comply
7 with Atmos Energy’s Construction Procedures Section 8.3.2 Sewer Cross Bore
8 Prevention and any related procedural or regulatory requirements.

9 In the Joint Motion to Approve Unanimous Settlement Agreement filed in Docket
10 No. 32-ATMG-359-RTS (“359 Docket”) regarding Atmos Energy’s Year Four SIP
11 Plan, Atmos Energy and KCC Staff (“Staff”) stated that they “agree that the cost of
12 replacing pipe segments greater than 100 feet in length of recently installed (post
13 1983) plastic pipe placed in low pressure service shall not be recovered through the
14 SIP charge unless Atmos Energy can show at the time it makes its filing for
15 approval of the SIP charge that either (i) the replacement of the installed (post 1983)
16 plastic pipe was equally or more cost effective than uprating the existing pipe, or
17 (ii) the replacement is necessary to comply with state or federal safety requirements
18 applicable at that time, and such is accepted by the Commission.”

19 In Docket No. 22-ATMG-299-TAR (“299 Docket”), Staff suggested in its Report
20 that because of the cost involved, Atmos Energy should consider limiting the sewer
21 inspection it performs for safety purposes in conjunction with its projects to a post-
22 construction camera inspection as required by Atmos Energy’s construction
23 standards. The purpose of my testimony is also to confirm that the costs included

1 in this filing regarding sewer cross bore prevention are only those costs necessary
2 to comply with Atmos Energy’s Construction Procedures Section 8.3.2 Sewer
3 Cross Bore Prevention and any related procedural or regulatory requirements.

4 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

5 A. Yes. I am sponsoring Exhibit RKH-1, which includes an analysis estimating the
6 difference in the cost of two projects with post-1983 plastic pipe segments greater
7 than 100 feet to demonstrate that it is equally or more cost effective to replace rather
8 than uprate and reuse those pipe segments.

9 **Q. WHAT IS A LOW PRESSURE SYSTEM?**

10 A. According to 49 C.F.R. Part 192.3, “Low-pressure distribution system means a
11 distribution system in which the gas pressure in the main is substantially the same
12 as the pressure provided to the customer.” In Atmos Energy’s O&M Manual, we
13 note that such a system has “no service regulators at customer meter sets.”

14 **Q. DOES ATMOS ENERGY’S OPERATIONS AND MAINTENANCE**
15 **MANUAL (“O&M MANUAL”) CONTAIN REQUIREMENTS**
16 **REGARDING LOW PRESSURE SYSTEMS?**

17 A. Yes. Atmos Energy’s O&M Manual Section 19.4.5 states as follows: “Low
18 pressure systems (i.e., systems with no service regulators at customer meter sets)
19 will not be uprated. No existing pipe (mains or services) in a low-pressure system,
20 regardless of material or date of installation, will be incorporated into an uprated
21 system.”

22 **Q. WHAT IS THE PURPOSE OF THIS SECTION OF THE O&M MANUAL?**

1 A. The purpose of Section 19.5.4 is to promote the safe operation of the system by
2 preventing over-pressurization that could occur through the uprating of existing
3 pipe in a low pressure system. Replacing rather than reusing this distribution pipe
4 eliminates the risk of an undocumented appurtenance or obsolete joint or joining
5 method being left in the system, reducing the risk of failure and incident. Atmos
6 Energy continuously evaluates available information in the industry, including
7 reported pipeline safety incidents of its peers, and my understanding is that this
8 information informed the decision to include Section 19.5.4 in the Company's
9 O&M Manual.¹

10 **Q. ARE THE PROJECTS INCLUDED IN THIS FILING REPLACEMENT OF**
11 **LOW PRESSURE SYSTEMS?**

12 A. Yes. As indicated in the project descriptions in Exhibit 5, all four projects included
13 in this filing were to replace low pressure systems.

14 **Q. DID ATMOS ENERGY FOLLOW THE REQUIREMENTS OF O&M**
15 **MANUAL SECTION 19.4.5 IN THE EXECUTION OF THESE PROJECTS?**

16 A. Yes.

17 **Q. DID ANY OF THE PROJECTS INVOLVE REPLACEMENT OF**
18 **SEGMENTS OF POST-1983 PIPE GREATER THAN 100 FEET?**

¹Specifically, on July 31, 2019, an incident occurred in Pennsylvania involving a low pressure system. "According to investigators, the primary cause of the explosion was the over-pressurization of the house piping and appliances – noting that Columbia Gas had failed to include the residence on the company's maps for its nearby "Dewey Avenue Replacement Project," and, as a result, the house was not equipped with a service regulator when operating pressure in the Columbia Gas distribution system was significantly increased." <https://www.puc.pa.gov/press-release/2023/puc-seeks-public-comment-on-revised-settlement-with-columbia-gas-concerning-washington-county-house-explosion#:~:text=According%20to%20investigators%2C%20the%20primary,was%20not%20equipped%20with%20a>

1 A. Yes. The project in Sedan included the replacement of three segments of plastic
2 pipe installed after 1983, and the project in Edna included one segment of plastic
3 pipe installed after 1983. The projects in Coffeyville and Bartlett did not include
4 replacement of a material amount of post-1983 plastic pipe.

5 **Q. PLEASE DESCRIBE THE ANALYSIS CONTAINED IN EXHIBIT RKH-1**
6 **REGARDING THE 3 SEGMENTS IN THE SEDAN PROJECT AND THE 1**
7 **SEGMENT IN THE EDNA PROJECT.**

8 A. To prepare the analysis, I outlined a process for reusing the pipe and raising
9 pressure on each existing segment of low-pressure polyethylene (“PE”) main that
10 included procedures that would be required if Atmos reused short sections of post
11 1983 pipe. To be in compliance with 49 C.F.R. 192.553 and 192.557, the design
12 phase of the project would incorporate the development of a detailed tie-in
13 procedure. This effort would require in-depth analysis and review by the project
14 design team, which would be reflected in the project's design cost. The project
15 procedures would include physically cutting out the segments intended to be reused
16 to perform a pressure test. Before the pressure test could be performed, a bypass
17 main would have to be put in place to provide continuity of service to customers
18 served by the system. The bypass would need to be buried beneath driveways or
19 street crossings to minimize the impact to residents, as these projects are in areas
20 with dense residential populations and downtown areas. The labor and material
21 charges to install these bypasses would be equal to or greater than the costs required
22 to replace the existing main. This effort would also add to the construction timeline,
23 increasing the costs for labor.

1 After identifying these procedures, processes and design changes, I used actual
2 historical cost information to develop a cost estimate for performing the services
3 bypassing and mains bypassing necessary for each segment as well as the cost
4 savings of the installation of the replacement pipe.

5 **Q. WHAT WERE THE RESULTS OF THE ANALYSIS?**

6 A. The analysis shows that the estimated impact on the Sedan project of uprating the
7 three segments of post-1983 pipe would be \$71,517 higher project costs than
8 replacement of those pipe segments, and the estimated impact on the Edna project
9 would be \$687 higher project costs than replacement of those pipe segments.

10 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING THIS ANALYSIS?**

11 A. In addition to complying with the requirements of Atmos Energy's O&M Manual
12 (as submitted to the KCC) and providing for the safest method of the replacement
13 of a low pressure system, the practice of replacing rather than reusing the post-1983
14 plastic pipe in these projects is more cost effective.

15 **Q. DID THE FOUR PROJECTS IN THIS FILING CONTAIN PROJECT
16 COSTS ASSOCIATED WITH SEWER CROSS-BORE PREVENTION?**

17 A. Yes. All four projects include the costs necessary to comply with Section 8.3.2
18 Sewer Cross Bore Prevention in Atmos Energy's O&M Manual. This procedure
19 requires verification of sewer systems location, documentation of decisions made
20 to minimize a cross bore from occurring, and post-construction camera inspection
21 by an approved camera inspection contractor of all sewer mains and lateral facilities
22 in close proximity to the project to confirm that a cross bore did not occur.

1 **Q. DID ATMOS ENERGY CONDUCT ANY MAPPING OF THE SEWER**
2 **SYSTEM OR CAMERA INSPECTIONS BEYOND THOSE**
3 **SPECIFICALLY REQUIRED BY SECTION 8.3.2?**

4 A. No. No activities outside of those specifically required by Section 8.3.2 occurred
5 on these projects. Any mapping of the sewer systems completed during these
6 projects is a standard part of the scope of work of the approved camera inspection
7 contractor's process to perform the pre- and post-camera inspections. There are no
8 additional costs included in the projects in this filing associated with sewer cross
9 bore prevention other than those necessary to comply with O&M Section 8.3.2.
10 Any sewer mapping activities included in the sewer cross bore prevention
11 procedures are also consistent with the requirements of K.S.A. § 66-1803, which
12 states, "An excavator shall not engage in excavation near the location of any
13 underground facility without first having ascertained, in the manner prescribed in
14 this act, a location of all underground facilities in the proposed area of the
15 excavation."

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

17 A. Yes, it does.

VERIFICATION

STATE OF KANSAS)
)
COUNTY OF JOHNSON)

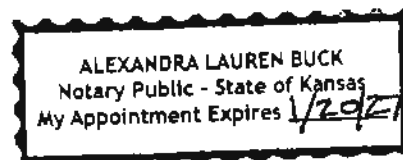
Rebecca (“Becca”) K. Holbrook, being duly sworn upon her oath, deposes and states that she is a Manager of Engineering Services for Kansas of the Colorado/Kansas Division of Atmos Energy Corporation; that she has read and is familiar with the foregoing Direct Testimony filed herewith; and that the statements made therein are true to the best of her knowledge, information, and belief.

Rebecca K. Holbrook
Rebecca K. Holbrook

Subscribed and sworn before me this 14th day of January 2025.

Alexandra Buck
Notary Public

My appointment expires: Jan. 30, 2027



Estimated Cost Difference of Uprating versus Replacing Post-1983 Pipe Segments	
Edna	
Install Date	6/8/1987
Diameter	2
Length	320
Services	0

Services bypassing	Unit cost		Total
Incremental potholing - soil	\$ 200	\$ -	\$ -
Re-test, EFV installation, reconnect - 2 man crew / hr	\$ 250	\$ -	\$ -
Additional inspection time per bell hole (open and abandon)	\$ 1,077	\$ -	\$ -
Long Side/Alley bypass bore - small drill crew / hr	\$ 261	\$ -	\$ -
Relight x 2 (two service interruptions)	\$ 137	\$ -	\$ -
Total increase in project costs		\$ -	\$ -

Mains bypassing			
Bypass length to be bored due to pavement [ft]		0	
Tie-In to Existing Line	\$ 2,611	\$ 2,611	\$ 2,611
Excavation for kill locations	\$ 2,611	\$ 2,611	\$ 2,611
Additional inspection time per bell hole (open and abandon)	\$ 1,077	\$ 2,153	\$ 2,153
Boring 2" PE Bypass for hard surface / ft	\$ (21)	\$ -	\$ -
Total increase in project costs		\$ 7,375	\$ 7,375

Reduction in project cost for not installing new plastic mains and services			
Services			
Additional service lines (including EFV)	\$ (3,100)	\$ -	\$ -
Mains			
2" P.E.	\$ (21)	\$ (6,688)	\$ (6,688)
Total reduction in project costs			\$ (6,688)

Services bypassing for reuse	\$ -	\$ -
Services replaced	\$ -	\$ -
Mains bypassing for reuse	\$ 7,375	\$ 7,375
Mains replaced	\$ (6,688)	\$ (6,688)
Net Impact on Project Cost to Uprate Existing Pipe Segments	\$ 687	\$ 687

Estimated Cost Difference of Uprating versus Replacing Post-1983 Pipe Segments				
Sedan				
	Install Date	1/25/2014	6/1/2016	10/14/2020
	Diameter	2	2	2
	Length	629	297	467
	Services	9	3	1

	Unit cost				Total
Incremental potholing - soil	\$ 250	\$ 2,250	\$ 750	\$ 250	\$ 3,250
Re-test, EFV installation, reconnect - 2 man crew / hr	\$ 250	\$ 9,000	\$ 3,000	\$ 1,000	\$ 13,000
Additional inspection time per bell hole (open and abandon)	\$ 1,077	\$ 2,422	\$ 807	\$ 269	\$ 3,499
Long Side/Alley bypass bore - small drill crew / hr	\$ 261	\$ 784	\$ 261	\$ -	\$ 1,046
CNG manifold - fittings and installation	\$ 300	\$ 300	\$ 300	\$ 300	\$ 900
CNG compression rental for project (18 weeks) with operator	\$ 4,500	\$ 56,077	\$ 18,692	\$ 6,231	\$ 81,000
Relight x 2 (two service interruptions)	\$ 137	\$ 2,472	\$ 824	\$ 275	\$ 3,571
Total increase in project costs		\$ 73,306	\$ 24,635	\$ 8,325	\$ 106,265

Mains bypassing					
Bypass length to be bored due to pavement [ft]		470	297	0	
Incremental potholing - hard surface	\$ 450				\$ -
Incremental potholing - soil	\$ 250	\$ 500	\$ 750	\$ 250	\$ 1,500
2" stopple for bypass	\$ 2,000	\$ 6,000	\$ 4,000		\$ 10,000
2" PE MAIN FULL TEE (PE)	\$ 2,000	\$ 2,000		\$ 2,000	\$ 4,000
Additional inspection time per bell hole (open and abandon)	\$ 1,077	\$ 4,306	\$ 2,153	\$ 1,077	\$ 7,536
Boring 2" PE Bypass for hard surface / ft	\$ 30	\$ 14,100	\$ 8,918	\$ -	\$ 23,018
Total increase in project costs		\$ 26,906	\$ 15,821	\$ 3,327	\$ 46,054

Reduction in project cost for not installing new plastic mains and services					
Services					
Additional service lines (including EFV)	\$ (3,000)	\$ (27,000)	\$ (9,000)	\$ (3,000)	\$ (39,000)
Mains					
2" P.E.	\$ (30)	\$ (18,883)	\$ (8,918)	\$ (14,001)	\$ (41,803)
Total reduction in project costs					\$ (80,803)

Services bypassing for reuse	\$ 73,306	\$ 24,635	\$ 8,325	\$ 106,265
Services replaced	\$ (27,000)	\$ (9,000)	\$ (3,000)	\$ (39,000)
Mains bypassing for reuse	\$ 26,906	\$ 15,821	\$ 3,327	\$ 46,054
Mains replaced	\$ (18,883)	\$ (8,918)	\$ (14,001)	\$ (41,803)
Net Impact on Project Cost to Uprate Existing Pipe Segments	\$ 54,328	\$ 22,538	\$ (5,350)	\$ 71,517