

In the Matter of the Application)
of Kansas Gas Service, A)
Division of ONEOK, Inc. for the) DOCKET NO. 12-KGSG-721-TAR
Approval Of An Infrastructure)
Replacement Program)
Surcharge)

Received
on

MAR 28 2012

by
State Corporation Commission
of Kansas

**DIRECT TESTIMONY
OF
RONALD D. BRIDGEWATER
ON BEHALF OF
KANSAS GAS SERVICE
A DIVISION OF ONEOK, INC**

DIRECT TESTIMONY
OF
RONALD D. BRIDGEWATER
KANSAS GAS SERVICE
DOCKET NO. 12-KGSG-___-TAR

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A. My name is Ronald D. Bridgewater. My business address is 11401 West 89th
3 Street, Overland Park, Kansas 66214.

4 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

5 A. I am employed by Kansas Gas Service a Division of ONEOK. I hold the
6 position of Vice President – East Region Operations.

7 Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND
8 PROFESSIONAL EXPERIENCE.

9 A. I earned a Bachelors degree in Mechanical Engineering from the University of
10 Missouri in 1988. Upon graduation I began employment with KPL Gas
11 Service Company, the predecessor to Kansas Gas Service, as a Distribution
12 Engineer. Since then, my entire career has been devoted to work in the
13 natural gas industry. I have held several positions in the areas of
14 engineering, regulatory compliance, and operations management. I was
15 named Vice President – East Region Operations in May, 2007.

16 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

17 A. The purpose of my testimony is to explain the Company's proposed
18 Infrastructure Replacement Program and the need for approval of the

1 Infrastructure Replacement Program Surcharge (IRP). Mr. David Dittmore
2 will provide testimony explaining the associated IRP which will enable the
3 Company to timely recover its investment in this important program.

4 Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF THE
5 INFRASTRUCTURE REPLACEMENT PROGRAM.

6 A. The Infrastructure Replacement Program was developed by Kansas Gas
7 Service, after consultation with the Pipeline Safety Division of the
8 Commission, to completely replace all of the Company's cast iron mains in its
9 distribution system. The Company currently has approximately 108 miles of
10 cast iron mains in its distribution system. This program represents a
11 commitment by Kansas Gas Service to replace all cast iron main in its system
12 over an eight-year period.

13 Q. WHY HAS THE COMPANY DETERMINED THAT IT IS APPROPRIATE TO
14 REPLACE CAST IRON MAINS IN SUCH A SHORT TIME FRAME?

15 A. Cast iron mains were used by natural gas distribution companies to provide
16 reliable and safe service for customers. At the time they were installed, cast
17 iron mains were considered to be a superior pipeline conduit compared to
18 other metallic products because of cast iron's relatively high resistance to
19 corrosion. Eventually other pipeline conduits were developed that provided
20 better service than cast iron pipe and cast iron has not been installed by
21 Kansas Gas Service since the early 1960s. Kansas Gas Service has been
22 gradually replacing our cast iron piping with more modern materials, but our
23 remaining cast iron pipe is now being targeted for accelerated replacement to

1 avoid concerns about continuing to rely on this aging piping without a pre-
2 determined timeline for replacement. Emphasis will be placed on prioritizing
3 the replacement of our smaller diameter cast iron pipe. The replacement of
4 cast iron pipe is a topic that is under review by the US Department of
5 Transportation and the Pipeline Hazardous Materials Safety Administration
6 (PHMMSA). PHMSA has instituted an inquiry nationwide to study how local
7 distribution companies are evaluating the replacement of their cast iron pipes.
8 It may only be a matter of time, in our opinion, before the federal government
9 will institute a policy of having all cast iron pipe replaced. With this program,
10 the Company will be able to set a firm deadline for removing the Company's
11 entire cast iron pipe.

12 Q. WHAT IS THE ESTIMATED COST OF THE INFRASTRUCTURE
13 REPLACEMENT PROGRAM?

14 A. I estimate that the cost of the Infrastructure Replacement Program will be
15 approximately \$70 Million dollars. It will involve the replacement of 108 miles
16 of cast iron pipe, forty miles of unprotected bare steel mains, as well as
17 expenditures required to reconnect the newly installed main with existing
18 plastic service lines. We will also replace approximately 3,000 bare steel
19 service lines associated with this project; but these costs will be recovered in
20 our GSRS mechanism. The great majority of the pipe to be replaced is either
21 four or six inches in diameter. Attached as Exhibit RDB-1 is a table showing
22 the breakdown of the miles of cast iron main to be replaced by pipe diameter.

1 Q. COULD YOU PLEASE EXPLAIN HOW THE COST ESTIMATE WAS
2 DETERMINED?

3 A. Yes. The estimated installation cost per foot for each pipe diameter in our
4 inventory was determined assuming the vast majority of this work will involve
5 restoring pavement. Our cost estimates per foot are based upon experience
6 with actual costs per foot and are shown below.

7

Diameter	Cost per Foot
4 Inch	\$60
6 Inch	\$90
8 Inch	\$130
10 Inch	\$200
12 Inch	\$200

8
9
10
11
12
13
14

15 The respective cost per foot for each pipe diameter is then multiplied by our
16 existing cast iron inventory footage for each pipe diameter size to arrive at the
17 cost to replace cast iron.

18 Q. PLEASE EXPLAIN THE OTHER MAJOR COST COMPONENTS INVOLVED
19 IN THIS PROGRAM?

20 A. In addition to the replacement of the cast iron pipe, there is an additional cost
21 to replace approximately 40 miles of unprotected bare steel pipe in the city of
22 Wichita which is interconnected with the cast iron main. Construction
23 efficiency requires that Kansas Gas Service replace interconnected bare steel

1 main simultaneously with the replacement of cast iron main. The
2 replacement of the associated bare steel main is estimated to be \$16 Million.
3 In addition to the replacement of the cast iron main and unprotected bare
4 steel main, there will be some additional costs to tie over approximately 8,000
5 plastic service lines that are attached to the replaced cast iron main and
6 unprotected bare steel main. I estimate these costs at \$3.2 Million and they
7 are included in the \$70.2 Million dollar estimate.

8 Q. WHAT PROCEDURE WILL THE COMPANY BE USING TO IDENTIFY
9 WHICH CAST IRON MAIN TO REPLACE?

10 A. The replacement program will place a priority on replacement of small
11 diameter pipe. However, larger diameter cast iron pipe will be replaced early
12 in the program in those situations where it is needed to bring new
13 intermediate pressure supply into the area or such pipe is in close proximity to
14 smaller diameter pipe, and replaced simultaneously in order to capture
15 construction efficiencies.

16 Q. HOW DID THE COMPANY DETERMINE THAT AN EIGHT YEAR TIME
17 FRAME WAS THE BEST TIME PERIOD TO COMPLETE THE PROGRAM?

18 A. Under the Company's current practices for removal of aging pipe, the
19 complete replacement of the cast iron pipe would have taken a significantly
20 longer period of time. With this program and the associated recovery of
21 expenditures that is being requested with this Application, the Company can
22 set a specific end date for the replacement of this pipe. With the timely
23 recovery of our investment in this program through the IRP, we know that we

1 will not have to compete with other capital projects for the financial resources
2 necessary for this large expenditure of funds to replace this pipe. We
3 selected the eight year time period because we felt that if we attempted to do
4 it any faster, we would be at risk of not being able to manage the replacement
5 program effectively. An eight year time frame will facilitate a prompt
6 replacement of the main while still permitting the proper management and
7 oversight of an expanded construction program. The quality control of this
8 replacement program is just as important to assure the future integrity of our
9 new piping as the replacement program itself.

10 Q. HOW WILL THE COMPANY KEEP TRACK OF THE COSTS OF THE
11 INFRASTRUCTURE REPLACEMENT PROGRAM?

12 A. The Company will track the costs for the program using its standard work
13 order process; however, a special identifier will be used within our Property
14 Accounting records to designate the work order as a cast iron replacement.
15 The majority of the costs will be charged to Account 376 Mains. This will
16 facilitate the identification of recoverable costs for the program when the
17 annual cost recovery filing is made each May. Mr. Dittmore will provide the
18 details of the accounting for this program and the recovery of costs in his
19 testimony.

20 Q. HOW MUCH IS THE COMPANY PROJECTING IT WILL SPEND IN THE
21 FIRST YEAR OF THE PROGRAM?

22 A. For the first year of the program, the Company is projecting that it will spend
23 one-eighth of the total expenditures or approximately \$8.75 Million. With the

1 submission of the next annual filing in May of 2013, there will be a true up of
2 our expenditures over the course of the program year and the charges to
3 customers will be adjusted during that filing. As explained in the testimony of
4 Mr. Dittmore, the cost of our investment will be recovered ratably over the
5 course of the year.

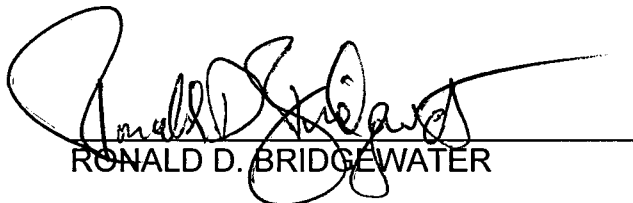
6 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

7 A. Yes.


VERIFICATION

STATE OF KANSAS)
) ss
COUNTY OF JOHNSON)

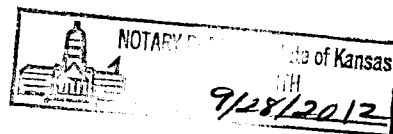
Ronald D. Bridgewater, being duly sworn upon his oath, deposes and states that he is Vice President, East Region Operations for Kansas Gas Service, a Division of ONEOK, Inc.; that he has read and is familiar with the foregoing Direct Testimony filed herewith; and that the statements made therein are true to the best of his knowledge, information, and belief.


RONALD D. BRIDGEWATER

Subscribed and sworn to before me this 28th day of March, 2012.


NOTARY PUBLIC

My Appointment Expires:
9/28/2012



**Kansas Gas Service
Infrastructure Replacement Program
Cost Estimate**

Exhibit RDB-1

Cast Iron Pipe Replacement by Diameter

Pipe Diameter	3"	4"	6"	8"	10"	12"	16"	20"	Total
Footage	152	280,140	175,739	66,092	4,207	39,920	1,844	520	568,614
Mileage	0.03	53.06	33.28	12.52	0.80	7.56	0.35	0.10	107.69
Estimated Cost	\$9,120	\$16,808,400	\$15,816,510	\$8,591,960	\$841,400	\$7,984,000	\$737,600	\$208,000	\$50,996,990

Associated Costs

8,000 Tie-Overs @ \$400 \$3,200,000
 40 Miles Bare Steel Main \$16,000,000

Total Program Cost Estimate \$70,196,990

Annual Total \$8,774,624