BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION

NASHVILLE, TENNESSEE

June 2, 2021

IN RE:	)	
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CHATTANOOGA GAS COMPANY PETITION FOR APPROVAL OF ITS PIPE REPLACEMENT PROGRAM	)))	**DOCKET NO. 20-00131**

ORDER APPROVING PIPE REPLACEMENT PROGRAM

This matter came before Vice Chairman Herbert H. Hilliard, Commissioner Robin L. Morrison, and Commissioner David F. Jones of the Tennessee Public Utility Commission ("Commission" or "TPUC") during the regularly scheduled Commission Conference held on April 12, 2021, to consider the *Chattanooga Gas Company Petition for Approval of Its Pipe Replacement Program* ("*Petition*") filed on December 2, 2020, by Chattanooga Gas Company, Inc. ("CGC", or "Company"). In summary, the *Petition* was granted.

THE *PETITION*

On December 2, 2020, the Company filed the *Petition* seeking approval of its plan to continue replacement of its aging pipeline infrastructure considered to be at highest risk for corrosion, cracks, breaks, and leakage. Through the Company's federally mandated Distribution Integrity Management Program ("DIMP") and other Company processes, and the recommendations of the Gas Pipeline Safety Division ("Division") of the Commission, the Company identified seventy-three miles of mains that should be replaced.[1] The *Petition* did not seek approval to recover any specific costs

[1] *Petition*, pp. 1-2 (December 2, 2020).

within this docket, but rather sought authorization to recover actual costs as they are incurred as part of the Company's Annual Rate Review Mechanism ("ARM") that was first approved by the Commission in TPUC Docket No. 19-00047.[2]

In support of the *Petition*, the Company included the sworn pre-filed direct testimony of Mr. Paul Leath, Regional Director of Operations for CGC. Mr. Leath provided testimony covering several areas: (1) prior cast iron and steel replacement programs, (2) DIMP, (3) evaluation and response to the Division's investigation and recommendation of replacement of vintage plastic pipe, (4) determination of which pipe should be replaced under the Pipe Replacement Program ("PRP"), (5) overall construction plan and DIMP process and its relationship to the PRP, and (6) basis for a seven-year proposed replacement schedule.[3]

Mr. Leath testified that evaluating the safety, integrity, and longevity of a distribution system pipeline is a constant process. Manufacturing processes and materials used for pipelines have evolved over time, from cast iron pipe to various forms of uncoated steel pipe and later coated and cathodically protected steel, to different types of plastic pipe.[4] While designed for long life, all pipeline infrastructure is subjected to moisture, vibrations, and other underground elements such as seasonal weather freezing and contractions, graphitization and corrosion.[5] The cumulative impacts can lead to cracks or breaks in pipes that result in gas leaks, a potential safety as well as environmental concern.[6] As such, they must be replaced from time to time.

In recent decades, replacing gas pipeline infrastructure to improve safety and reliability has been an issue for the natural gas operators such as CGC. In 1991, the U.S. Department of

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[2] *Id.* at 11. *See In re: Petition of Chattanooga Gas Company to Opt into an Annual Review of Rates Mechanism Pursuant to Tenn. Code Ann. § 65-5-103 (d)(6)*, Docket No. 19-00047, *Order Approving Settlement Agreement* (October 7, 2019).
[3] Paul Leath, Pre-Filed Direct Testimony, pp. 3-4 (December 2, 2020).
[4] *Id.* at 7.
[5] *Id.* at 8.
[6] *Id.* at 7-8.

Transportation's Research and Special Programs Administration, the former name of the Pipeline and Hazardous Materials Safety Administration ("PHMSA"), required pipeline operators to identify and replace cast iron pipe. In 2009, PHMSA directed operators to create and implement by August 2011 a DIMP.[7] Under DIMP guidelines, operators must evaluate the specific characteristics of pipe in the system and the operating environment to identify and reduce risks and threats.

Mr. Leath testified that aside from the DIMP process, the investigation into a CGC residential customer's house fire and explosion by the Division was a catalyst for the *Petition*.[8] According to the Company, the Division did not identify any violation by CGC, but did determine there was a ductile fracture of a plastic pipe known as Aldyl-A pipe.[9] A PHMSA Advisory Bulletin indicates the susceptibility of this type of pipe to premature brittle-like cracking. Therefore, the Division recommended that CGC identify the Aldyl-A plastic pipe in its system and develop a five to seven-year plan to remove it.[10]

According to the Company, there is not a non-destructive test to identify this type of pipe.[11] Aldyl-A pipe manufactured prior to 1974 is considered to have low resistance to slow crack growth which adversely impacts its longevity. Pipe manufactured after 1983 is generally not considered to be at risk of requiring replacement prior to its projected useful life.[12] Given the ambiguity in the Company's records, CGC concluded it was appropriate to remove all pre-1974 plus mid-vintage 1974-1983 plastic pipe as determined by leak surveys, as well as some additional steel pipe, classified as bare steel, but could be uncoated or using early coating processes now considered to be less effective.[13] Mr. Leath testified that the replacement will provide benefits by reducing system leaks

[7] *Id*. at 9.
[8] *Id.* at 11-12.
[9] *Id.* at 12.
[10] *Id.* at 12-13.
[11] *Id.* at 14.
[12] *Id.*
[13] *Id.* at 15.

and the associated spot repair costs and at the same time right-sizing otherwise currently undersized pipe to improve system pressure and flow characteristics to help existing and future customers.[14]

CGC identified approximately seventy-three miles of pipe (out of approximately 1,675 miles of system main pipe) that should be replaced in five to seven years under the PRP.[15] According to the Company, the estimated cost of this replacement is approximately $118 million. Based on the Division's request for replacement over a five to seven-year period, CGC has determined that a seven-year schedule is the most appropriate replacement time frame to balance customer cost impacts with safely operating the system while removing the vintage plastic and bare steel pipe in a timely manner.[16] The average yearly miles of pipe replaced under this plan is 10.4 miles, although Mr. Leath testified that circumstances may require adjusting the miles replaced up or down each year.[17] According to the Company, it is necessary for long-term safety and reliability of its system to remove the identified pipe and that the best balance between long-term safety/reliability is to remove it on a seven-year schedule.[18]

In further support of the *Petition*, Mr. Archie R. Hickerson, Director of Rates and Tariff Administration of AGL Services Company[19] also filed testimony on behalf of the Company. Mr. Hickerson provided an overview of (1) the rate impact of the proposed PRP and (2) use of the ARM process as a cost recovery mechanism for the PRP. CGC developed plans to replace identified pipe over a five-year, seven-year, ten-year, and fifteen-year period and Mr. Hickerson prepared exhibits showing the projected annual and monthly rate impact on an average residential customer.[20] The $118 million estimated cost to replace seventy-three miles of pipe was based upon the experience of

[14] *Id.* at 15-16.
[15] *Id.*
[16] *Id.* at 17-18.
[17] *Id.* at 18.
[18] *Id.* at 20-21.
[19] AGL Services Company is a subsidiary of Southern Company Gas, the parent of Chattanooga Gas Company.
[20] Archie R. Hickerson, Pre-Filed Direct Testimony, pp. 4-6 (December 2, 2020).

CGC's engineering and budgeting teams, as well as the prior cast iron and bare steel replacement program and the ongoing DIMP program.[21]

Mr. Hickerson provided projected Residential customer rate impacts for each of the time frames set forth by CGC in the planning phase based on a series of assumptions for illustrative purposes only.[22] Under a five-year program, the average Residential customer bill was projected to cumulatively increase $88.34 annually or $7.36 per month.[23] Under a seven-year program, the increase was projected to be $87.10 annually or $7.26 per month. Under a ten-year program, the increase was projected to be $85.46 annually or $7.12 per month. And, under a fifteen-year program, the increase was projected to be $79.31 annually or $6.61 per month.[24] As the length of the program is increased, accumulated depreciation and accumulated deferred income tax has a somewhat lower impact on customers' bills. The main difference between programs is not the total amount of the increase, but the speed at which the rates increase.[25]

The Company submitted that the most efficient and cost-effective method for the PRP costs to be evaluated and recovered is through the Company's ARM process. The Company points out that the Commission's adoption of the PRP does not require any modification of the ARM mechanism.[26] CGC did not propose any specific rate design for PRP cost recovery under the ARM. The Commission will determine the appropriate rate design for recovery in the ARM based on the evidence in each ARM docket. Mr. Hickerson's Exhibit ARH-1 was submitted for illustrative purposes only and for comparison, assumes the rate increase is applied to the customer base charge.[27]

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[21] *Id.* at 4.
[22] *Id.* at 4-5.
[23] *Id.* at Exhibit ARH-1.
[24] *Id.*
[25] *Id.* at 5-7.
[26] *Id.* at 7-8.
[27] *Id.* at 8.

In the ARM filing, CGC states it will provide one or more additional PRP-specific schedules to clearly identify the pipeline replaced and the actual associated cost of replacement for that calendar year.[28] Mr. Hickerson testifies that CGC will also supplement its budget filing as appropriate to separately itemize specific budgeted PRP expenditures, including any variance from amounts scheduled under the approved PRP. Additionally, CGC avers it will provide a PRP variance report in the ARM to reflect any increase or decrease to the mileage replaced each year, including information regarding why the mileage changed. If the Commission requires any further documentation, CGC will comply with the request.[29] In conclusion, Mr. Hickerson testifies that the Commission's authorization of the PRP over the number of years proposed and the recovery of those costs through the annual ARM filing will result in a significant step toward improving the safety and reliability of CGC's system.[30]

PROCEDURAL HISTORY

No parties sought intervention in this matter. Given the rate impact and safety issues involved, the Consumer Advocate Unit in the Financial Division of the Tennessee Attorney General's Office ("Consumer Advocate") engaged in informal discussions with the Company and sought pertinent information regarding the *Petition* which was subsequently filed with the Commission.[31] In a letter filed in the docket on February 24, 2021, the Consumer Advocate indicated that following a review of the record, it had determined not to intervene in the docket.[32]

THE HEARING

The hearing in this matter was noticed by the Commission on April 1, 2021 and held during the regularly scheduled Commission Conference on April 12, 2021. The hearing was held

[28] *Id.*
[29] *Id.* at 8-9.
[30] *Id.* at 9.
[31] *Chattanooga Gas Company's Response to Informal Questions* (January 19, 2021).
[32] *Letter of the Consumer Advocate* (February 24, 2021).

electronically via WebEx. Pursuant to an extension of Executive Order No. 16 first issued by Governor Bill Lee on March 20, 2020, the Commission met electronically, without a physical quorum. Electronic access to the hearing was made available to the parties and the public. Appearances were made by the following:

> Chattanooga Gas Company – Floyd R. Self, Esq., Berger Singerman, LLP, 313 North Monroe Street, Suite 301, Tallahassee, Florida, 32301; J.W. Luna, Esq., Butler Snow LLP, 150 3rd Ave. South, Suite 1600, Nashville, Tennessee 37201.

Mr. Paul Leath and Mr. Archie R. Hickerson provided testimony and were available to answer any questions. Members of the public were given an opportunity to offer comments, but no one sought recognition to do so.

FINDINGS AND CONCLUSIONS

The Company set forth in its *Petition* the federal directives that have been issued over the years and the current recommendations of the Commission's Gas Pipeline Safety Division. Combined with its own internal evaluations, the CGC has developed the proposed PRP which it requests approval to implement over a seven-year period. The Company also requests approval to recover its prudently incurred costs related to the PRP through its ARM. Based upon a review of the evidentiary record, the Hearing Panel found that the pipe identified in the PRP should be replaced and that replacement is prudent for the long-term safety and reliability of the CGC distribution system. Therefore, the Hearing Panel voted unanimously to approve the *Petition*. The Hearing Panel found that the seven-year replacement period proposed by CGC is reasonable and that the Company should have the flexibility to determine the number of miles replaced each year based on attendant facts and circumstances.

Further, the Hearing Panel found that the most efficient and cost-effective method for the Company to recover its prudently incurred costs associated with the PRP is through its annual ARM filing. As such, the Company is instructed to include its actual costs in the calculations of its annual

ARM filing and provide all schedules and information necessary to support those costs with the filing. The Panel reminded the Company that its approval is not a blank check and all such costs should be just and reasonable. The Hearing Panel instructed the Company to file a copy of its annual budget to support the budgeted costs for the PRP replacements and variance reports to explain any differences between budgeted and actual costs.

IT IS THEREFORE ORDERED THAT:

1. The *Chattanooga Gas Company Petition for Approval of Its Pipe Replacement Program* (“*Petition*”) filed on December 2, 2020, by Chattanooga Gas Company, Inc., is approved.

2. Chattanooga Gas Company, Inc. shall file in this docket file a copy of its annual budget to support the budgeted costs for the Pipe Replacement Program replacements and variance reports to explain any differences between budgeted and actual costs.

3. Any party aggrieved by the Commission’s decision in this matter may file a Petition for Reconsideration with the Commission within fifteen days from the date of this Order.

4. Any party aggrieved by the Commission’s decision in this matter has the right to judicial review by filing a Petition for Review in the Tennessee Court of Appeals, Middle Section, within sixty days from the date of this Order.

FOR THE TENNESSEE PUBLIC UTILITY COMMISSION:

Vice Chairman Herbert H. Hilliard,
Commissioner Robin L. Morrison, and
Commissioner David F. Jones concurring.

None dissenting.

ATTEST:

Earl Taylor

Earl R. Taylor, Executive Director