

**BEFORE THE
TENNESSEE REGULATORY AUTHORITY**

**PREPARED DIRECT TESTIMONY
OF
RICHARD R. LONN**

**IN RE:
CHATTANOOGA GAS COMPANY
DOCKET NO.**

Q. Please state your name, position, and address.

A. Richard R. Lonn, Director, Regulatory Compliance, AGL Services Company. My business address is 10 Peachtree Place, Location 1365, Atlanta, Georgia 30309.

Q. What are your principal responsibilities as Director, Regulatory Compliance?

A. I am responsible for working with pipeline-safety regulators in all seven states in which AGL Services Company operates as well as those at the federal level. These operating companies are; Atlanta Gas Light Company (GA), Virginia Natural Gas, Inc. (VA), Chattanooga Gas Company (TN), Elizabethtown Gas (NJ), Elkton Gas (MD), Florida City Gas (FL), and Jefferson Island Storage (LA). I work with regulators in the various jurisdictions to ensure that the operating companies are in compliance with all appropriate federal and state rules and regulations, which includes pipeline safety, OSHA, DOT, and environmental regulations.

Q. Please outline your educational and professional training and experience.

A. Attachment A summarizes my educational and professional experience.

Q. Have you previously submitted testimony before the Tennessee Regulatory Authority (“TRA”) or any other regulatory commission?

1 A. Yes, I submitted testimony as part of CGC's previous rate proceeding (Docket
2 #04-00403), and I have testified before the Georgia Public Service Commission in
3 multiple dockets, including Atlanta Gas Light Company's most recent rate
4 proceeding and capacity plan, as well as several certificate and safety related
5 dockets.

6 **Q. What is the subject of your testimony?**

7 A. I will present a description of Chattanooga Gas Company's ("CGC" or the
8 "Company") proposed Bare Steel and Cast Iron Pipeline Replacement Program
9 ("PRP") tracker, including the proposed cost-of-service impact during the attrition
10 period, and the expected tracker recovery for the first two years of the PRP tracker.

11 **Q. Are you sponsoring exhibits in connection with your testimony?**

12 A. Yes. I am sponsoring Exhibit RRL-1, which contains the estimated expenditures
13 for the PRP. I also am sponsoring Exhibit RRL-2, which contains various
14 schedules to support CGC's cost of service related to the first two years of the PRP
15 tracker.

16 **Q. Were these exhibits and related schedules prepared under your direction and
17 supervision?**

18 A. Yes.

19 **Q. Please describe the PRP.**

20 A. The PRP is an eight-year plan that will remove the remaining 82 miles of bare
21 steel and cast iron main and related services from the CGC gas system estimated to
22 be in place as of January 1, 2007. The pipe to be replaced was identified using the
23 Company's graphical information system which identifies all of the various types
24 and sizes of main throughout the system. The pipe will be replaced using
25 primarily plastic pipe and some cathodically-protected steel for high pressure

1 main. The Company is proposing that the PRP costs be recovered separate from
2 base rates through a tracker.

3 **Q. Why does CGC need to replace its bare steel and cast iron main?**

4 A. Bare steel pipe is a type of steel main that was installed without an effective
5 protective coating. Due to the lack of protective coating, this type of pipe cannot
6 normally be protected effectively against corrosion. Corrosion of metals is a
7 naturally occurring phenomenon which returns the metal to its native or ore state.
8 The gas industry began extensively using pipe with more effective coatings in the
9 late 1950s. Most steel main installed before this time is considered bare steel,
10 although some pipe installed after this period also falls within that category.
11 Because bare steel pipe cannot be protected effectively, it has the potential to leak
12 more often. Therefore, this type of pipe must be leak-surveyed and monitored
13 more frequently than other pipelines per 49 C.F.R. §192 *et seq.*

14 **Q. Please continue.**

15 A. Cast iron pipe pre-dates the use of steel pipe in the gas industry. Prior to the
16 widespread use of steel pipe, cast iron or ductile iron pipe was used exclusively.
17 This type of pipe also has many problems associated with its use. Cast iron pipe
18 cannot be welded, so it is installed in individual pieces with a joint between every
19 two pieces of pipe. Cast iron joints shift or dry out resulting in leaks which create
20 costly repairs. Cast iron over time begins to graphitize, losing its wall strength,
21 becoming soft and breakable. This has the potential to cause catastrophic failure
22 in the pipeline whenever there is ground movement such as third-party excavations
23 or even ground movement due to frost or drought. As this pipe is installed in the

oldest urban areas, it creates additional safety and restoration concerns. Again, like bare steel, this type of pipe must be leak-surveyed and monitored more frequently than protected pipelines per 49 C.F.R. §192 *et seq.* Because neither bare steel nor cast iron pipe can be protected effectively against corrosion, both will degrade over time, resulting in increased maintenance costs and safety concerns.

Q. What are the benefits of replacing bare steel and cast iron pipe?

A. The primary benefits are reduced maintenance costs and enhanced safety on those particular parts of the system. The replacement will result in not having to repair an ever-increasing number of leaks related to bare steel and cast iron pipeline, and will remove the potential for catastrophic failure associated with cast iron pipe. In the long term, the escalation of the maintenance costs related to the repair of those leaks and the restoration of pavement will be reduced due to the replacement of that pipe.

Q. Are there any other benefits?

A. Yes. Removal of this older pipe from the system will allow CGC to operate its system more efficiently. The newer pipe will be able to be operated at higher pressures which will minimize delivery problems during winter months when people need gas the most. Increasing system operating pressures also will allow CGC to install pipeline smaller in diameter when adding to its distribution system which reduces costs. CGC will be able to use smaller diameter pipe because higher pressure systems will allow the smaller pipe to move the same, or greater, volume of gas as the more costly larger diameter pipe required at lower operating

pressures. Finally, CGC will be able improve its operations by discontinuing the use of many of the special fittings needed for the repair of the bare steel and cast iron pipe.

Q. What are the estimated costs of the PRP?

A. The costs of the program are summarized in Exhibit RRL-1. The total estimated capital expenditure required to install the new pipe is included in column 5 of Exhibit RRL-1 and totals \$29,196,967 over the eight-year program. The estimated cost of removing the old bare steel and cast iron pipe is included in column 6 and totals \$4,321,151 over the eight-year program. The estimated total cost of the program is \$33,518,118 over eight years.

Q. How will the cost be recovered from customers?

A. The Company is proposing that the PRP cost of service be recovered through a separate cost recovery tracker. This cost recovery tracker would have a duration of eight years consistent with the duration of the PRP. At the end of the eight-year tracker, the unrecovered investment in the PRP would be included in base rates for recovery. However, recovery through the tracker would continue until base rates are adjusted to include the un-recovered investment in the PRP.

Q. Why do you propose to recover the PRP cost of service through a separate revenue tracker?

A. The PRP costs are significant, annual, non-revenue producing capital expenditures. These expenditures will increase the net utility plant investment for CGC and result in a significant additional base-revenue requirement throughout the PRP. The total addition to utility plant would be between \$3.9 and 4.6 million per year and would increase rate base by approximately 3%. Without a tracker to recover

1 the cost of service, CGC will be required to file reoccurring petitions for rate relief
2 in the upcoming years as PRP work progresses. Filing multiple rate cases is an
3 expensive and inefficient approach to the recovery of the PRP cost of service, and
4 would increase operating expenses for the Company. At an estimated cost per rate
5 case of \$300,000, which normally is included in each request for rate relief, this
6 unnecessary cost to customers is significant. The PRP tracker would allow CGC
7 to recover its cost of service by means most efficient for the Company and the
8 TRA, saving the ratepayers costs associated with multiple rate-case filings.
9 Additionally, the PRP tracker would provide two other significant benefits. First,
10 it would remove external financial pressures which could result in possible delays
11 to the replacement schedule and second, by removing those pressures, it would
12 allow the company to be more efficient in the design, bidding, and construction of
13 the work. This would save the ratepayers overall cost by allowing construction to
14 occur at the lower cost-per-foot figures estimated in Exhibit RRL-1.

15 **Q. Mr. Lonn, please describe the operation of the PRP tracker.**

16 A. The PRP tracker would be designed to recover the PRP cost of service incurred
17 during the pipeline replacement period of eight years. The cost of service would
18 include an operating income recovery component, a return on rate base recovery
19 component, and a carrying cost component. The total cost of the PRP would be
20 accumulated for each calendar year for recovery. Calendar years would be defined
21 as the "Cost Year" for the PRP. CGC would recover from customers the PRP cost
22 of service for each Cost Year over annual periods beginning each April 1
23 following a Cost Year. Each recovery period would be referred to as a "Collection

Year.” The base-revenue requirement would be recovered on a per-customer basis. The amount recovered per customer would equal the total cost of service/base-revenue requirement for the Cost Year divided by the estimated number of customers for the following cost year. Any amount over or under collected during a Collection Year would be included in the calculation of the amount to be collected in the following Collection Year.

Q. Please describe and quantify the calculation of the PRP cost of service and the resulting base-revenue requirement for the attrition period.

The three components of the cost of service used to calculate the base-revenue requirement related to the PRP are an operating income component, a return on rate base component and a carrying cost component. Exhibit RRL-2 summarizes the cost of service of the PRP and shows the estimated cost of service for the attrition period (2007) and the following Cost Year (2008). The operating income component includes depreciation expense related to PRP assets less income tax expense effects. As shown on Exhibit RRL-2, Column 1, Lines 1 through 3, the PRP decreases operating income by \$35,261 for Cost Year 1. The resulting revenue requirement for Cost Year 1 is \$58,007.

The return on rate base component is CGC’s cost of capital authorized on its rate base or investment in the PRP program. The rate base related to PRP is calculated as cumulative capital expenditures for PRP assets less a deduction for accumulated depreciation and a deduction for accumulated deferred income taxes. The balance in accumulated depreciation is a debit balance due to the fact that the cost of removal is included in the accumulated depreciation balance and exceeds the

1 depreciation related to the PRP assets. As shown on Exhibit RRL-2, Column 1,
2 Lines 5 through 8, the increase in average rate base resulting from the PRP in Cost
3 Year 1 is \$1,953,313. The resulting revenue requirement on the PRP investment
4 for Cost Year 1 is \$235,886 and is shown on Line 9, Column 1.

5 The carrying cost component is the cost of capital authorized to compensate for the
6 delay in recovery of the base-revenue requirement associated with the PRP. A
7 delay occurs because base revenue earned in a Cost Year is not collected under the
8 PRP tracker until the following Collection year. The estimated revenue
9 requirements for the Cost Years ending December 2007 (Cost Year 1) and
10 December 2008 (Cost Year 2) are \$303,460 and \$908,559, respectively, and are
11 shown on Exhibit RRL-2, Line 11 of Columns 1 and 2.

12 **Q. Does this conclude your testimony at this time?**

13 Yes, it does.

RICHARD R. LONN

PROFESSIONAL EXPERIENCE:

Atlanta Gas Light Company (April 1985 to present)

Director, Regulatory Compliance

Jan 2005 to present

Responsible for external regulatory compliance for the corporation in the seven states in which it now operates (GA,TN,VA,NJ,FL,MD,LA) and working jointly with Engineering on ensuring internal regulatory compliance. Work with Federal, State and local officials and national trade organizations on a regular basis. This includes State pipeline safety groups, State DOTs, PHMSA (Regional and in DC).

Director, Regulatory Compliance

June 2002 to Dec 2004

Responsible for directing the activities of 27 employees in support of all three AGLC Resources Operating subsidiaries (Atlanta Gas Light Co., Chattanooga Gas Co. & Virginia Natural Gas) 1,900,000 customers. Same responsibilities as previous position with the addition of:

1. Damage Prevention
2. Facilities Locating

Chief Engineer & Director, Regulatory Compliance

Sept 2000 to June 2002

Responsible for directing the activities of 14 employees in support of all three AGL Resources Operating subsidiaries (Atlanta Gas Light Co., Chattanooga Gas Co. & Virginia Natural Gas) 1,800,000 Customers:

1. Regulatory Liaison (Ga, Tn, Va)
2. Compliance with Federal Regulations
3. Gas System Operations Procedures
4. Audits
5. Corrosion System
6. Corporate Safety
7. Operations Training Development
8. Environmental Procedures
9. Leak Surveys/ROW Operations

Director, Engineering Compliance**Aug 1999 to Sept 2000**

Responsible for directing the activities of 54 employees. Same responsibilities as previous position with the following additions:

- | | |
|---------------------------|------------------------|
| 1. Codes & Standards | 4. Corporate Safety |
| 2. Research & Development | 5. Operations Training |
| 3. Lab Operations | |

Manager, Engineering Support Services**Nov 1998 to Aug 1999**

Responsible for directing the activities of 47 employees who provide a variety of Engineering and Operations Services in support of the Company's 39 local Service Centers and 1,450,000 customers. A listing of these services includes:

- | | |
|-----------------------------|---------------------------------|
| 1. Right-of-Way Acquisition | 6. Materials Specifications |
| 2. Leak Surveys | 7. Operations Procedures |
| 3. System Corrosion Control | 8. Capacity Planning |
| 4. Right-of-Way Maintenance | 9. LNG Engineering Support |
| 5. Communications Support | 10. State & Federal Regulations |

Manager, Metro Region Operations & Engineering**Feb 1994 to Nov 1998**

Responsible for the directing the activities of 75 employees who provided a variety of Engineering and Operations Services in support of 9 Service Centers in the Metro Atlanta area and 950,000 customers. A listing of these services includes:

- | | |
|------------------------------|---------------------------------|
| 1. Distribution Engineering | 6. DOT/Marta Relocation Work |
| 2. Contractor Locating | 7. System Improvements |
| 3. System Replacements | 8. System Corrosion Control |
| 4. 24 hr Central Dispatching | 9. Safety & Operations Training |
| 5. Construction Contracts | 10. New Customer Support |

Division Engineer, Atlanta Division**Aug 1988 to Feb 1994**

Technical Liaison for Division Vice President and 9 Service Centers in the Metro Atlanta area in support of 950,000 customers. Reported directly to Vice President and assisted him and the Service Centers on all Operations and Engineering Issues including Contractor Locating.

Staff Engineer, Planning and Design**Dec 1987 to Aug 1988**

Responsible for review of all designs and proposals for Atlanta and Augusta Divisions of the company. Handled system capacity planning for the company at that time, doing computer based system modeling to determine the need for future system enhancements.

Distribution Engineer, Atlanta and Marietta Service Centers Apr 1985 to Dec 1987

Provided distribution engineering services for the above listed Service Centers. Duties included Engineering in the following areas:

- | | |
|-----------------------------|-------------------------|
| 1. Meter Set Design | 2. System Improvements |
| 3. New Business | 4. DOT relocations |
| 5. System Replacements | 6. Field Inspections |
| 7. Materials Specifications | 8. Equipment evaluation |

Additional Information:

Professional Engineer in the State of Georgia (March 1992, PE # 19848)
Board Member and Past Chairman for the Utilities Protection Center of GA (17 years.)
Past Chair - American Gas Association(AGA)Customer Service & Utilization Committee
Winner of AGA's first ever "Trailblazer" Awards for contributions to the industry – 2006
Winner of AGA Bronze (1996) and Silver (2006) Awards of Merit
Atlanta United Way Loaned Executive of the Year Finalist – 1987
Past Chairman of Pipeliners of Atlanta

Education:

Bachelor of Civil Engineering
Georgia Institute of Technology
Atlanta, Georgia
(December 1984)

Military: United States Naval Reserve (active)

August 1981 to August 1983
Petty Officer 2nd Class (frocked) – Honorably Discharged