

**BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION  
NASHVILLE, TENNESSEE**

**August 3, 2018**

**IN RE: )  
)  
CHATTANOOGA GAS COMPANY )  
PETITION FOR APPROVAL OF )  
AN ADJUSTMENT IN RATES AND )  
TARIFF; THE RECOVERY OF )  
THE AUA MECHANISM )  
REVENUE DEFICIENCY; AND )  
THE IMPLEMENTATION OF )  
ALTERNATIVE REGULATORY )  
METHODS )**

**Docket No.  
18-00017**

**REBUTTAL TESTIMONY OF  
  
JACOB A. ZILIAK  
  
ON BEHALF OF  
  
CHATTANOOGA GAS COMPANY**

1    **I.       INTRODUCTION AND WITNESS QUALIFICATIONS**

2    **Q.       Please state your name and business address.**

3    A.       My name is Jacob A. Ziliak. My business address is Ten Peachtree Place NE,  
4           Atlanta, GA 30309.

5    **Q.       By whom are you employed and in what position?**

6    A.       I am the Director, Engineering Design for Southern Company Gas. Southern  
7           Company Gas is the holding company for four natural gas distribution companies,  
8           including Chattanooga Gas Company (“CGC” or the “Company”).

9    **Q.       Please describe your responsibilities as Director, Engineering Design.**

10   A.       As Director, Engineering Design, I have responsibility for providing engineering  
11           services for the installation of new facilities, the replacement of existing facilities  
12           and operations support for Southern Company Gas, including CGC.

13   **Q.       Please summarize your educational background and work experience.**

14   A.       In 2004, I received a Bachelor of Arts degree in Civil Engineering from the  
15           University of Evansville in Evansville, Indiana.

16           I began my career in 2004 at Development Consultants Group in Duluth,  
17           Georgia, as a Site Development Engineer designing residential and commercial  
18           subdivisions in the Metro Atlanta area. In 2009, I joined Southern Company Gas  
19           (previously AGL Resources) as an Engineer in the Engineering Design  
20           Department. In 2011, I was promoted to Staff Engineer in the Compliance  
21           Department administering the Public Awareness Program for Southern Company  
22           Gas. In 2013, I was promoted to Division Engineer in the Engineering Design

1 Department, then Manager, Engineering Design in 2015 and I now serve in my  
2 current role as Director, Engineering Design.

3 **Q. Have you previously filed testimony before this or any other Commission?**

4 A. I have not previously filed testimony before this or any other Commission.

5 **II. PURPOSE OF TESTIMONY**

6 **Q. What is the purpose of your rebuttal testimony?**

7 A. The purpose of my rebuttal testimony is to respond to several items raised within  
8 the testimony of the Consumer Advocate witness Mr. William H. Novak.  
9 Generally, I am going to demonstrate that Mr. Novak's contention that rates should  
10 be set based on historical capital spends instead of CGC's capital budget is wrong,  
11 and would never provide sufficient capital for CGC to build the infrastructure it  
12 needs in order to provide safe and reliable service to existing and future customers.  
13 More specifically, I will look at this issue in the context of the Red Bank-Signal  
14 Mountain project that is a critical gas supply need of CGC and, that Mr. Novak's  
15 approach completely excludes to the detriment of CGC the clear need demonstrated  
16 by CGC's witness Ms. Deborah Santolin. The CGC capital budgets are more  
17 reliable indicators of actual capital spends, and under any analysis are far superior  
18 to the use of a five-year historic average or even a three-year historic average.

19 **Q. Are you sponsoring any exhibits?**

20 A. No, I am not.

21 **III. REBUTTAL TO MR. NOVAK.**

22 **Q. What is the specific testimony of Mr. Novak that you are responding to?**

23 A. Beginning on page 18, line 3, with the Question 31 and Answer 31, Mr. Novak  
24 states on lines 8 and 9 that he has used a five-year historical average for

1 Construction Work in Progress (“CWIP”). Further on lines 14-17 he states, “I  
2 believe that CGC’s budget-based approach to forecasting Construction Work in  
3 Progress is incorrect because it relies solely upon the Company’s anticipated budget  
4 expenditures as opposed to the actual experience that has historically taken place.”  
5 Finally, from page 18, line 19 through page 19, line 2, Mr. Novak calls into question  
6 CGC's capital budget as “far more than what has been historically spent” (page 18,  
7 line 20), and he concludes by saying his belief “that it would be inappropriate to set  
8 rates on a speculative budget that is materially more than the historical expenditure  
9 amounts” (page 18, line 21 through page 19, line 2).

10 **Q. Let’s start with the appropriateness of using CGC's CWIP budget versus a**  
11 **five-year historical average for ratemaking purposes. What’s wrong with**  
12 **using historical information to set future rates?**

13 **A.** I know very little about the ratemaking process, but I can speak from the  
14 engineering perspective regarding our ability to plan, design, and build facilities.  
15 If our capital budget was based solely on historic averages as proposed by Mr.  
16 Novak, then we would never have enough money to meet our customers’ needs,  
17 especially with escalating costs, system upgrades, or new construction to meet  
18 present or future needs. Especially with respect to CGC, as CGC's witnesses Mr.  
19 Dallas and Ms. Santolin discuss and as the CRMA witnesses also raise, there are  
20 both existing customer needs as well as new customer growth needs that must be  
21 met that require capital investments over and above historic amounts. Locking in  
22 our future expenditures only to averages of past amounts would be unsound  
23 engineering. Adoption of Mr. Novak’s approach would limit our capital and place

1 the system in a downward spiral that would never have enough money to meet even  
2 basic levels of service for present customers. When you add in new investments  
3 for the projects that Mr. Dallas and Ms. Santolin discuss that are designed primarily  
4 for existing customers, but which also help to facilitate system expansion growth  
5 for existing and new customers, you would be in an even worse position.

6 **Q. This takes us to the CGC budget and budget process. Mr. Novak questions on**  
7 **page 19 both the appropriateness of what he calls “a speculative budget” as**  
8 **well as the fact that CGC is proposing “materially more than the historic**  
9 **amounts” for 2018-2019. Can you please first address how the budgeting**  
10 **process works and its reliability and then we can look at the specifics of the**  
11 **increased investment CGC has included.**

12 A. Yes. The process of identifying needs, evaluating options, designing facilities that  
13 meet those needs can involve several different groups at Southern Company Gas,  
14 including Capacity Planning, System Planning, Operations and Engineering  
15 Design. Ms. Santolin, for example, has discussed what their group does with  
16 respect to assessing supply capacity needs and options for meeting those needs.

17 **Q. What happens next?**

18 A. There is an annual and long term (generally, five years out) capital budgeting  
19 process for CGC that is started around the middle of each year. As we take a  
20 comprehensive look at the anticipated cost drivers for each year, we also use that  
21 information to update long term budgets as well. In general, our budget process  
22 considers the following:

- 23 • Historical spend.

- 1           • Known strategic projects.
- 2           • Projected impacts of any new regulations.
- 3           • Labor market and contractor bid pricing adjustments (primarily for new
- 4           business work where blanket contract pricing is used).
- 5           • Any other known items that may affect the work that must be done.

6   **Q.   Are there other things that can impact the budget development process?**

7   A.   Yes. We do enough projects for the Southern Company Gas subsidiaries so as to  
8       understand the local situation. For example, we know what the cost of pipe is on a  
9       market specific basis, such as Chattanooga versus Naperville or Atlanta. We are  
10      also familiar with the local conditions. Similarly, we know that for the Signal  
11      Mountain project, it's a big rock, so laying pipe in rock has different requirements  
12      and costs than laying pipe in Georgia red clay. As projects are assessed and  
13      prioritized, the budget is reviewed, modified, and ultimately approved.

14   **Q.   What happens once the budget is approved?**

15   A.   The budget also includes key dates or milestones. Once the budget is approved, the  
16       Construction Operations team on the appropriate dates would implement the project  
17       by putting out bids, awarding contracts, monitoring and inspecting the project for  
18       quality control and any issues that might come up, and then ultimately approving  
19       and accepting the work so the facilities can be put into service.

20   **Q.   In practice, how reliable has the budget process proven to be in terms of actual**  
21       **expenditures versus budgeted amounts?**

22       In general, the process allows for the greatest accuracy in predicting future spending  
23       requirements and is highly reliable. Obviously, no project comes in to the penny

1 as budgeted, as we get projects both over and under budget. But generally, our final  
2 spend lines up well with the original budget. And even when there are variances,  
3 we can sometimes make that work to the benefit of customers.

4 **Q. Let's now turn our attention to the specific issues Mr. Novak raises with**  
5 **respect to whether the budget in this case is speculative and why the 2018-2019**  
6 **budget is higher than the historic average. Can you please discuss why there**  
7 **is an increase in the 2018-2019 budget and why it is not speculative?**

8 A. Yes. As Ms. Santolin discusses in her testimony, the Capacity Planning team has  
9 identified the loss of supply capacity due to a contract that is going to terminate in  
10 a few years. In response to that anticipated loss, they have determined that building  
11 a new pipeline to connect CGC's existing LNG facility to Red Bank and Signal  
12 Mountain is the most cost-effective supply option. This project has been  
13 thoroughly reviewed, approved, and is now at the beginning of the implementation  
14 phase. We have broken the total project into two phases. The first phase, out to  
15 Red Bank from the LNG plant, is budgeted at approximately \$6 million and is  
16 designated as "Strategic" in the capital plan. The phase from Red Bank to Signal  
17 Mountain will be spread over two years at a total cost of approximately \$12 million  
18 and is expected to be completed in late 2020. The bid process for the Red Bank  
19 phase is beginning in August.

20 **Q. Is the Red Bank-Signal Mountain LNG project the only part of the increase in**  
21 **the budget?**

22 A. No. Another significant increase in spending in the 2018 budget that must be  
23 completed is the Lookout Mountain pressure improvement. This project requires

1 an over-capacity 4" main feeding the top of the mountain to be looped with a larger  
2 8" main to adequately serve the customers on the coldest days of the year. This  
3 project has been a high priority for the System Planning group for multiple years,  
4 but it has been delayed due to availability of an approved back-feed across the state  
5 line from Atlanta Gas Light. Unfortunately, with the growth both in the Lookout  
6 Mountain area as well as in northwest Georgia, this temporary back-feed option  
7 will no longer be viable in another year or so. As we have assessed alternative  
8 routes, we have been constrained by the Tennessee Department of Transportation  
9 that would rather we not use the only road to the top of the mountain, which is also  
10 a primary road to the tourist areas. However, permission was recently obtained to  
11 utilize an alternative path along a Nature Conservancy Trail that will be the most  
12 cost effective while also causing the least amount of disruption to the area. These  
13 delays may result in some of this project being completed in 2018 with the  
14 remainder in 2019, but obtaining the easement for the Nature Conservancy route  
15 will help to get us started this year.

16 **Q. If this Lookout Mountain project is delayed to some extent, what happens to**  
17 **the money budgeted for this budget year?**

18 A. As this project demonstrates, there are always going to be unplanned items that  
19 arise throughout each year which also must be addressed. As these items are  
20 identified, CGC will re-prioritize other projects, if possible, based first on safety  
21 and compliance then down to operational stability and other factors.

22 **Q. Do you have an example of this type of re-prioritization?**



1 A. Yes. We have a major pressure improvement project in 2018 called the Middle  
2 Valley PRIM (pressure improvement). The need for this pressure improvement  
3 was driven by current system challenges as well as customer growth in the area and  
4 was identified through pressure system modeling for some of the new developments  
5 in early 2018 well after the 2018 budget was established. To remediate this issue,  
6 a large new pipeline is being installed to serve the growth and maintain stability of  
7 the system for the existing customers. The estimate for this project is  
8 approximately \$1.8M which is well above the historical pressure improvement  
9 budget of \$0.5M to \$1M. In this case, we are planning to use some of the 2018  
10 budgeted dollars for the Lookout Mountain project I discussed to help fund this  
11 Middle Valley PRIM, which is currently a higher risk to system stability than  
12 Lookout Mountain is this winter. As other funds may not be expended, we would  
13 similarly move around projects based upon system priorities and where we are with  
14 issues like permits, easements, etc.

15 **Q. You have discussed a couple of things that can impact even the best vetted**  
16 **projects using the process you have described for how projects and budgets**  
17 **are built. If you were limited to a capital budget based only on historical**  
18 **averages, as Mr. Novak wants, would you be able to address CGC's capital**  
19 **project needs?**

20 A. Absolutely not. There are a number of different things that can have significant  
21 impacts on your capital plan that you could not account for if you were limited to  
22 using only historical budgeting.

23 **Q. Can you provide some examples of what you mean?**

1     A.     Yes, for example, if you used only historical averages for projects, you could not  
2           account for items such as:

- 3           • Relocations driven by transportation departments of federal, state, or local  
4           governments. Budgets based on historical averages don't provide enough  
5           flexibility to meet large scale projects outside of CGC's authority or control  
6           such as a multiple mile, road widening where CGC has a large steel main.
- 7           • Obsolescence of large equipment. An example may be the replacement of  
8           a pipeline heater at a major tap station. These heaters have a general life  
9           expectancy of 30 years. There are only a small number of them in the  
10          system, but when they must be replaced there will have to be an increase to  
11          the Regulator Station budget line above and beyond historical levels.
- 12          • New regulations. CGC costs can be significantly affected by new  
13          regulations and/or permit requirements from the federal down to the local  
14          level. For example, the City of Chattanooga is in the process of  
15          implementing much more stringent permit and restoration requirements  
16          around land disturbance and hard surface restoration. If these regulations  
17          are fully implemented, they will significantly affect construction costs.
- 18          • Other items with a low frequency of repair/replace that have a high impact.  
19          Examples may include tap station rebuilds, capital upgrades to the CGC  
20          Liquified Natural Gas facility, retrofitting the CGC Transmission line for  
21          in-line inspection to meet new requirements, etc.

22     **IV.     CONCLUSION**

1   **Q.     Should the Commission adopt Mr. Novak’s historic averages approach of**  
2           **CGC’s budgeted amounts for capital expenditures?**

3   A.    No. Our budgets are well researched, evaluated, and prepared, and they reflect the  
4           best means of capturing our capital spends each year. Mr. Novak’s assertion that  
5           the CGC budget should be based solely on historical spend does not account for  
6           these additional factors outlined above that are generally in addition to historical  
7           run rates. By strategically planning these higher capital expenditures over multiple  
8           years where possible, such as what CGC is doing with the Red Bank-Signal  
9           Mountain project, approximately \$18 million over three years, CGC is better able  
10          to plan for and spread out the impacts to its customers over time. If CGC could  
11          only rely upon averages of historic spending, vital projects such as Red Bank-Signal  
12          Mountain and Lookout Mountain could not be done, or we would offset those  
13          expenditures by skimping on ongoing maintenance and repairs. Neither is desirable  
14          or in the best interests of our customers.

15   **Q.     Does this conclude your rebuttal testimony?**

16   A.    Yes.