

**BEFORE THE
TENNESSEE REGULATORY AUTHORITY**

**PREPARED DIRECT TESTIMONY
OF
RONALD D. HANSON**

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

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

2 A. Ronald D. Hanson, Manager, Regulatory Analysis, AGL Services Company. My
3 business address is 10 Peachtree Place, Location 1686, Atlanta, Georgia 30309.

5 **Q. Please describe your professional background and education.**

6 A. I received a Bachelor of Business Administration Degree (Cum Laude) in
7 Accounting from the University of Georgia in 1985 and a Master of Business
8 Administration Degree in Finance from Georgia State University in 1995. I am a
9 Certified Public Accountant in the State of Georgia.

10
11 Upon graduation from the University of Georgia in 1985, I was employed by an
12 AGL Resources Inc. ("AGLR") affiliate as a Staff Accountant. In that position
13 my responsibilities included: (1) the preparation of detailed statistical data in
14 formats used for quarterly and annual external reporting, (2) the preparation of
15 financial reports to support rate case filings, (3) designing and implementing the
16 Company's first set of consolidated financial statements and the model used to

1 present a consolidated statement of cash flows, and (4) the preparation of net
2 present value analyses to support lease versus purchase decisions.

3
4 During 1985 through 1999, I held various positions of increasing responsibility
5 for accounting issues within AGLR leading to my promotion in 1999 to Manager
6 of Regulatory Analysis. In my present position, I am responsible for the
7 preparation of regulatory filings and financial analyses for all of AGLR's
8 regulated affiliates, including Chattanooga Gas Company. My responsibilities
9 include the preparation of cost of service data reports for regulatory filings, the
10 preparation of such data for management, and the maintenance of relationships
11 with regulatory staffs in various jurisdictions.

12
13 **Q. Have you previously submitted testimony before the Tennessee Regulatory**
14 **Authority or any other regulatory commission?**

15 A. Yes. I submitted testimony before the New Jersey Board of Public Utilities in
16 Docket No. GR05060494 in the matter of the petition of Pivotal Utility Holdings
17 Inc. d/b/a Elizabethtown Gas Company to (1) reconcile its basic gas supply
18 service rate, and (2) revise its commodity rates for commercial and industrial air
19 conditioning and distributed generation uses and seasonal delivery service; I
20 submitted testimony before the Florida Public Service Commission on behalf of
21 Pivotal Utility Holdings, Inc. d/b/a Florida City Gas in the Petition of Florida City
22 Gas for Approval of an Acquisition Adjustment and Recognition of a Regulatory
23 Asset; and I submitted testimony before the Maryland Public Service Commission
24 on behalf of Pivotal Utility Holdings, Inc. d/b/a Elkton in Case No. 9126 in the

1 Matter of the Application of Pivotal Utility Holdings, Inc. d/b/a Elkton Gas for
2 Authority to Increase its Natural Gas Rates.

3
4 **Q. What is the purpose of your testimony?**

5 A. I will present various financial and accounting data in support of Chattanooga Gas
6 Company's ("CGC" or the "Company") proposed rate increase of \$2,572,993 in
7 this proceeding, including (A) the proposed revenue adjustment required, (B)
8 CGC's cost of service, (C) the determination of rate base and (D) the capital
9 structure and cost of debt financing.

10
11 **Q. Please explain the historic test period and the attrition period used in**
12 **preparation of the Company's case?**

13 A. The Company's historic test period is the twelve months ended June 30, 2009.
14 This period represented the most recent time period for which public financial
15 data was available when the Company began preparing its case. The attrition
16 period for which the Company's estimated revenue requirement is based on is the
17 12 months ending April 30, 2011, which represents the twelve months succeeding
18 May 1, 2010, the expected date of implementation of new rates.

19
20 **Q. Are you sponsoring exhibits in connection with your testimony?**

21 A. Yes. I am sponsoring the following exhibits in support of CGC's base revenue
22 requirement for the twelve month attrition period ending April 30, 2011:

- Exhibit RDH-1 – CGC’s Statement of Income before and after the proposed rate adjustment and calculations of the proposed base revenue adjustment, base revenue conversion factor and Tennessee excise and federal income taxes.
- Exhibit RDH-2 – Comparative Statements of Income for the test period and attrition period.
- Exhibit RDH-3 – The elements of estimated average rate base as of April 30, 2011.
- Exhibit RDH-4 – A summary of the Company’s estimated cost of capital as of April 30, 2011.

Q. Were these exhibits and related schedules prepared by you or under your direction and supervision?

A. Yes.

A. CALCULATION OF REVENUE REQUIREMENT

Q. Please summarize the information contained in Exhibit RDH-1, supporting the Company’s calculated base revenue requirement?

A. Schedule 1 reflects the attrition period base revenue deficiency and proposed rate adjustment necessary to allow the Company the opportunity to earn a fair and reasonable return on its investment. Column 1 provides an income statement for the attrition period; Column 2 provides the Company’s proposed rate adjustment;

1 and Column 3 provides an income statement for the attrition period after the
2 Company's proposed rate adjustment. Additionally, Line 15 of Schedule 1
3 includes the calculated rate of return of 6.69% before the proposed rate
4 adjustment. Schedule 2 of Exhibit RDH-1 provides the calculation of the
5 proposed base revenue adjustment in the amount of \$2,572,993 required for the
6 Company's proposed rate of return of 8.28%. This calculation is based on the
7 Company's anticipated gross revenue conversion factor, as calculated on
8 Schedule 3 of Exhibit RDH-1. Schedule 4 of the Exhibit provides the calculation
9 of the Tennessee excise and federal income taxes before and after the proposed
10 rate adjustment.

11
12 **Q. Please summarize the primary components of the proposed revenue**
13 **adjustment?**

14 A. Comparing the operating margin, cost of service, rate base and cost of capital for
15 the attrition period with the amounts authorized in the Company's last rate case in
16 TRA Docket No. 06-00175, the primary components of the proposed base
17 revenue adjustment are as follows:

- | | |
|--------------------------------|---------------|
| • Decrease in operating margin | \$1,889,000 |
| • Increase in cost of capital | \$1,256,000 |
| • Decrease in rate base | (\$1,028,000) |
| • Increase in cost of service | \$ 482,000 |

1 **Q. Please summarize the purpose of Exhibit RDH-2, Schedules 1 through 4.**

2 A. Schedules 1 and 2 provide a comparison of the changes between the test period
3 and the attrition period and Schedules 3 and 4 provide the impact of the pro-forma
4 adjustments on the unadjusted test period.

5
6 **Q. Please summarize the major estimated changes in operating income from the**
7 **test period to the attrition period that are included in the calculation of the**
8 **estimated revenue requirement.**

9 A. As detailed on Exhibit RDH-2, Schedule 1, operating income is forecast to remain
10 relatively flat from the test period to the attrition period. Operating margin is
11 expected to decrease by \$1.3 million as supported by the direct testimony of
12 Marcie Shields. Operating expenses are expected to decrease by \$1.0 million. The
13 major components are a decrease in taxes other than income of \$1.1 million and a
14 decrease in depreciation expense of \$1.3 million. These decreases are partly offset
15 by an increase in operation and maintenance expense (“O&M”) of \$.8 million and
16 an increase in income taxes of \$.5 million.

17
18 **I. INCOME STATEMENT**

19
20 **A. Operating Revenues**

21 **Q. Please explain in detail how you developed the forecasted operating income**
22 **for the attrition period contained in Schedule 1 of Exhibit RDH-1, column 1.**
23

1 A. The first component of the forecasted operating income is Operating Revenues.
2 The forecast of Operating Revenues, Gas Cost and Other Revenues for the
3 attrition period is provided in the direct testimony of Marcie Shields. Allowance
4 for funds used during construction (“AFUDC”) was forecast by multiplying the
5 forecasted balance of Construction Work in Progress (“CWIP”) for the attrition
6 period by the estimated weighted average cost of capital (“WACC”) for the
7 attrition period. The estimated balance of CWIP is based on the 13 month average
8 CWIP during the test year. The calculation of AFUDC as well as each other
9 component of operating income is provided in response to TRA Minimum Filing
10 Guideline No. 25. The second component of operating income is operation and
11 maintenance (“O&M”) expense. The forecasts of some of the major expense
12 components are based on specific expense forecasts while others are based upon a
13 general expected percentage increase. Schedule 2 of Exhibit RDH-2 provides a
14 listing of all major expense categories for the test period and attrition period.
15

16 **B. Operating Expenses**

17 **Payroll Expense**

18 **Q. Please identify and explain the forecast of each element of O&M not based**
19 **on the general growth percentage.**

20 A. Payroll was forecast based on an estimate of base pay plus non-base pay. Base
21 pay was forecast by taking annualized base pay as of June 21, 2009 (the final
22 payroll in the test year) and adjusting for known changes in employee numbers
23 and for expected changes in pay rates. As of June 21, 2009 CGC had 39

1 employees. By September 2009 the Company had added two additional
2 employees to fill vacant positions and had re-assigned one CGC employee to
3 AGL Services Company. The net effect is that CGC will have 40 employees for
4 the attrition period. The base pay for each employee was increased by 3% in
5 March 2010 and March 2011 for estimated increases in base pay. The 3%
6 represents the expected merit increase based on the Company's annual review of
7 salaries and market conditions. Total base pay forecast for the attrition period is
8 \$2,054,175.

9
10 **Q. What is considered non-base pay and how was it forecast?**

11 A. Non-base pay includes amounts paid to employees in addition to the standard
12 hourly rate and includes overtime, double time and beeper pay. The forecast for
13 non-base pay was divided into two groups of employees; liquefied natural gas
14 ("LNG") plant employees and other non-exempt employees. Non-base pay for
15 CGC's five LNG operators is estimated to be 17.5% during the attrition period.
16 15% is due to shift scheduling required to meet the seven days a week, twenty
17 four hours a day operational needs of the plant and 2.5% is due to other LNG
18 activities. Two other LNG employees who are not a part of the shift scheduling
19 overtime incur approximately 2.5% of overtime. Overtime pay for employees
20 other than LNG operators is based on overtime percentages for the test year.
21 Total overtime for the attrition period is \$279,475.

22
23 **Q. What is the total payroll forecast for the attrition period?**

1 A. The total payroll forecast for the test year including base and non-base pay is
2 \$2,333,650, of which \$2,147,475 (92.02%) is forecast as O&M costs and
3 \$186,175 (7.98%) is forecast as capital costs. This allocation between O&M and
4 capital is for the attrition period is based on the payroll capitalization percentages
5 during the test year.

6
7 **Bad Debt Expense**

8 **Q. Please explain how you estimated bad debt expense.**

9 A. Bad debt expense was estimated based on CGC's actual write-off experience for
10 the 24 months ended June 2009. The actual write-off percentage, .90%, includes
11 only the non-gas portion of customers' bills since the gas portion is recovered
12 through the Company's purchased gas adjustment. The .90% was then applied to
13 the estimated margin, excluding revenues for recovery of damages to the
14 distribution system, for the attrition period of \$29,529,400 to arrive at the
15 estimated bad debt expense of \$266,659. In addition, the Company expects to
16 incur \$30,803, based on the test year amount, of bad debt expense related to its
17 recovery of damages to the distribution system. Total bad debt expense for the
18 attrition period is \$297,462.

19
20 **Employee Benefits Expense**

21 **Q. What are the components of employee benefits expense included in the**
22 **attrition period?**

1 A. Employee benefits expense in the attrition period includes costs associated with
2 401(k) benefits, group health benefits, pension expense, post retirement benefits
3 other than pensions and variable compensation. The Company expects to incur
4 \$1,270,641 in employee benefit costs during the attrition period.

5
6 **Q. How did the Company estimate 401(k) benefits costs?**

7 A. 401(k) benefits were estimated based on the average test period expense per
8 employee of \$1,980. This amount was adjusted to include the 3% estimated pay
9 increase in March 2010 and March 2011. The result is a per employee estimated
10 cost of \$2,089 for 40 employees, which results in an attrition period total 401(k)
11 benefit cost of \$83,560.

12
13 **Q. Please describe how group health and other benefits were calculated.**

14 A. Group health benefits were estimated based on the average test period expense per
15 employee of \$7,478. The cost per employee is expected to be equal to the level of
16 the amount in the test year which results in an estimated cost of \$299,120 when
17 applied to the attrition period employee level of 40. During the test year the
18 Company also incurred \$10,372 in other benefits expense which includes short-
19 term disability, physicals and miscellaneous benefits. The Company applied the
20 general growth percentage of 2.02% described below to arrive at an estimated
21 expense for the attrition period of \$10,582.

1 **Q. How did you estimate pension expense for the attrition period?**

2 A. The Company's pension expense of \$601,000 was estimated based on a forecast
3 of required future pension contributions for the qualified pension plan. The
4 qualified pension plan contribution is based on estimates by MERCER, the
5 Company's actuary. Based on these estimates, CGC is expecting average annual
6 contribution requirements of approximately \$600,000 for plan years 2010 – 2013.
7 Therefore, the qualified pension plan expense of \$601,000 reflected in the
8 attrition period is expected to continue through at least 2013. Additionally,
9 pension expense of \$37,744 is included for the non-qualified pension plan and is
10 based on the payments made during the test period.

11
12 **Q. How did you estimate post retirement benefits other than pensions expense?**

13 A. Postretirement benefits other than pensions (PBOP) was based on an estimate
14 performed by the Company's actuary, Mercer. The expense was estimated in
15 accordance with Statement of Financial Accounting Standards No. 106
16 Employers' accounting for Postretirement Benefits Other Than Pensions (SFAS
17 106). The estimated expense for the attrition period is \$103,277.

18
19 **Q. Did the Company include any costs associated with variable compensation?**

20 A. Yes. The Company included direct variable compensation costs associated with
21 its annual incentive plan (AIP). The estimated attrition period cost was
22 determined using the 2009 AIP using the applicable rate for each employee class
23 multiplied by the total estimated payroll for each employee during the attrition

1 period. The variable compensation cost is approximately 5.8% of total payroll.
2 Total variable compensation for the attrition period is estimated to be \$135,358 of
3 which \$124,559, or 92.02%, is included as O&M expense and \$10,799, or 7.98%,
4 is included as capital expense during the attrition period. The allocation between
5 O&M and capital is based on the payroll capitalization percentages during the test
6 year.

7
8 Additionally, the Company also included \$296,071 of variable compensation in
9 its estimate of AGL Services Company (“AGSC”) allocated costs associated with
10 the AIP and approximately \$135,000 associated with the AGLR’s Long-term
11 Incentive Plan.

12
13 **Q. What is the purpose of variable compensation?**

14 A. As a subsidiary of AGLR, CGC participates in AGLR’s compensation program,
15 and variable compensation is a necessary and important component of AGLR’s
16 total compensation philosophy.

17
18 **Q. Would you describe AGLR’s total compensation philosophy?**

19 A. AGLR seeks to maintain total compensation programs that are balanced in terms
20 of each element of pay, including base pay and variable compensation programs.
21 AGLR’s goal is to set compensation levels that are responsive to market
22 conditions at median levels so that it can attract and retain qualified employees
23 who can help provide safe, reliable and quality utility service at a reasonable cost.

1 Employee compensation is reviewed at least annually and set using external
2 market surveys to determine reasonable and appropriate compensation levels.
3 These surveys provide data on both base salary **and** variable pay target levels and
4 related forms of compensation paid by comparable employers to similarly situated
5 employees. Using this data, AGLR sets annual compensation levels relative to
6 the 50th percentile. This means that AGLR targets the middle-of-the-road
7 benchmark, where 50% of companies would pay more than AGLR and 50%
8 would pay less. In summary, AGLR's total compensation is designed to be both
9 competitive and cost-effective, and this compensation design includes both base
10 and variable compensation.

11 Variable compensation is an integral part of what renders the Company's overall
12 compensation package competitive. It is widely prevalent in the current market in
13 which the Company competes for labor and provides many cost and service
14 quality benefits for the Company's customers. The Company's base salaries and
15 variable targets constitute a reasonable level of costs consistent with current
16 market conditions and should be reflected in CGC's rates.

17 Because variable compensation varies with business results, it encourages
18 employees to focus on the financial health of an organization and motivates them
19 to control costs, enhance productivity and maximize efficiencies. Therefore,
20 customers benefit to the extent that Company management can minimize costs
21 and maximize productivity as a result of variable compensation. By reducing
22 costs through aggressive management, the Company avoids or minimizes
23 increases in rates to customers.

1 **Q. Does variable compensation include non-financial measures of performance?**

2 A. Yes. In fact, CGC places a greater emphasis on the performance of non-financial
3 measures than on financial measures. This is done primarily through individual
4 performance measures. In 2008, approximately 60% of variable compensation
5 payments for CGC were based on individual performance measures such as
6 safety, customer service, operating efficiency and compliance. Overall, these cost
7 savings and efficiency targets result in employee focus on excellent customer
8 service, good stewardship of resources and productive teamwork.

9
10 **Q. How would excluding the variable compensation component impact AGLR's**
11 **total compensation program impact?**

12 A. As indicated previously, the Company's total cash compensation, including both
13 base and variable compensation, is set at about the 50th percentile of the market.
14 If the variable compensation component is excluded, CGC's compensation would
15 no longer be consistent with the market. Excluding the variable pay component
16 from the Company's rates would result in cost of service levels that are
17 unreasonable in relation to the market and require CGC to increase its base salary
18 and wage rates to remain competitive. While replacing variable compensation
19 with an increase in base salaries to fully competitive levels would have no impact
20 on the Company's revenue requirement, efficiencies and related customer service
21 benefits discussed previously could be adversely impacted.

1 **Q. Did the Company incorporate any capitalization of benefits in its cost of**
2 **service?**

3 A. Yes. Capitalized benefits expense was forecast by multiplying the estimated level
4 of benefits expense for the attrition period by the percentage of capital payroll to
5 total payroll, or 7.98%, for the test year. Benefits capitalization was applied to
6 group health benefits, 401(k) benefits, pension benefits,
7 PBOP, AIP and other miscellaneous benefits expense. The forecast total amount
8 of benefits capitalized is \$(101,369).

9
10 **Expenses Based on the General Growth Percentage**

11 **Q. Please identify and explain the forecast of each element of O&M based on the**
12 **general growth percentage.**

13 A. The general growth percentage is the estimated change in the consumer price
14 index 2.02% from the end of test period through the end of the attrition period.
15 The following expense categories were forecast using the general growth
16 percentage: Fleet Services and Facilities Expense, Outside Services, Sales
17 Promotion expense, Customer Accounts and Service Expense, Administrative and
18 General Expenses, Administrative and General Expenses Capitalized, Other
19 Distribution and Storage Expense and AGSC allocations. The amounts forecast
20 for each of the categories is shown on Schedule 2 of Exhibit RDH-2.

21
22 **Q. Were any adjustments made to these categories of expense other than growth**
23 **for inflation?**

1 A. Yes. Sales Promotion and Administrative and General expenses were reduced to
2 eliminate non –jurisdictional expenses. Additionally, Administrative and General
3 expenses were adjusted to include the proper level of the amortization of rate case
4 costs in the attrition period.

5
6 Outside Services Expenses were adjusted to eliminate expenses related to contract
7 meter reading expenses. As a result of the implementation of the automated meter
8 reading system transition from October 2008 through April 2009 the Company
9 was able to eliminate \$409,768 from outside services expense from the test year.

10 Outside services expenses were also adjusted to reflect an increase in expenses
11 that will occur as a result of increased pipeline replacement activity during the
12 attrition period. CGC plans to replace 10.8 miles of its distribution system in
13 2010 and 4.8 miles in 2011 as compared to approximately 2.9 miles during the
14 test period. While most of the costs related to pipeline replacement are capital cost
15 that are included for recovery in utility plant the Company also expects to incur
16 \$144,996 in additional operations and maintenance expenses related to the
17 rebuilding of meters and relighting of customers appliances that will occur as
18 residual activities during the pipeline replacement process.

19
20 Other distribution expenses were adjusted to include the cost of painting the
21 Liquefied Natural Gas (“LNG”) Plants. During the summer of 2010 the Company
22 expects to incur \$341,571 related to the painting of the LNG plant. The Company

1 is proposing to amortize this cost for recovery over 5 years which results in the
2 inclusion of \$68,314 in the cost of service during the attrition period.

3
4 Finally, AGSC allocated costs were adjusted for 1) the estimated cost for changes
5 in the customer service costs resulting from the transitioning of call center
6 operations, 2) the level of employee benefits for AGSC employees and 3) the
7 elimination of non-jurisdictional promotional and civic and community affairs
8 amounts included in the allocated costs.

9
10 **Q. Please explain the change in costs resulting from the call center transitioning.**

11 A. As discussed in the testimony of Mr. Lindsey, AGSC is in the process of
12 transitioning its call center operation to the existing call center in Georgia. These
13 operations had previously been performed through an outsourcing arrangement.
14 Allocated costs from AGSC are expected to increase by \$269,229 for customer
15 service activities during the attrition period as compared to the test period. This
16 increase is due to general, inflationary cost increases as well as costs associated
17 with the transition of the call center. The forecast of customer service costs for the
18 attrition period is based primarily upon preliminary budget forecasts for the last 6
19 months of 2010. By July 2010 the call center is expected to be fully transitioned.
20 Therefore, expected costs to be incurred during the last 6 months of the 2010
21 budget were used as a baseline to estimate the costs to be incurred during the
22 attrition period. The costs were allocated to CGC based upon the allocations
23 factors that will be used to allocated costs to CGC after the transition.

1 **C. Depreciation and Amortization Expense**

2 **Q. Please describe your forecast of depreciation and amortization expense.**

3 A. Depreciation and amortization expense was estimated using the composite
4 depreciation rates resulting from a deprecation study as proposed in the direct
5 testimony of Ms. Rhonda Watts and the estimated average utility plant in service
6 for the attrition period. Depreciation also includes an allocated amount of
7 depreciation expense from AGSC. As described earlier in my testimony,
8 allocated costs from AGSC were forecast based on the attrition period amount
9 plus the general growth percentage. AGSC allocations are assigned to expense
10 categories and accounts based upon the account to which the expense was
11 charged during by AGSC during the test period. Depreciation and amortization
12 for the attrition period is estimated to be \$5,119,444 which is comprised of
13 \$4,772,435 of direct depreciation expense and \$347,009 of allocated deprecation
14 expense. For the test period the Company incurred \$6,429,569 of depreciation
15 expense which is comprised of \$6,108,100 of direct depreciation expense and
16 \$321,469 of allocated depreciation expense. The decrease in direct depreciation
17 expense is due to the decrease in the proposed depreciation rates as described in
18 detail in the depreciation study and Ms. Watts' testimony. The decrease is partly
19 offset by an increase in depreciable plant.

20
21 **D. Taxes Other Than Income**

22 **Q. Please identify and explain the forecast of each element of taxes other than**
23 **income.**

1 A. Estimated attrition period taxes other than income total \$3,710,522 compared to
2 \$4,783,646 for the test period. As with depreciation expense a portion of AGSC
3 allocated costs for both the attrition period and the test period are assigned to
4 taxes other than income. Schedule 2 of Exhibit RDH-2 provides a listing of all
5 categories of taxes other than income for the test period and attrition period.
6 These taxes include property, gross receipts, and franchise taxes as well as
7 franchise, TRA inspection fees, payroll taxes and allocated taxes other than
8 income. The primary component of property taxes was estimated based on the
9 percentage of property taxes to utility plant for property taxes paid in 2009
10 multiplied by the estimated balance of utility plant during the attrition period.
11 Property taxes also include an estimate of taxes paid for underground gas stored
12 and leased plant.

13
14 **Q. Did the Company estimate gross receipts taxes in a manner consistent with**
15 **its 2006 rate case?**

16 A. Yes. The Company estimated its gross receipts taxes based on the same
17 methodology proposed by the Consumer Advocate and Protection Division of the
18 Tennessee Attorney General's Office in CGC's 2006 rate case. This methodology
19 was adopted by the Company and incorporated in the stipulation agreed to by
20 both parties and approved by the TRA.

21
22 **Q. What is the basis for the Tennessee gross receipts taxes?**

1 A. In August of each year, the Company files a gross receipts tax return that covers
2 the period beginning in July of that year through June of the following year. The
3 calculation of the tax expense is based in the twelve months ended September of
4 the previous year.

5 For example, in August 2009, the company filed a return covering the tax period
6 July 2009 – June 2010, and the tax was calculated based on financial information
7 for the period October 2007 – September 2008. Similarly, when the Company
8 files its return in August 2010, it will cover the tax period July 2010 – June 2011
9 and will be based on financial information for the period October 2008 –
10 September 2009.

11
12 **Q. Please summarize the methodology used to estimate gross receipts taxes in**
13 **the attrition period.**

14 A. The methodology used to estimate gross receipts taxes for the attrition period is
15 based on the taxable periods reported in the gross receipts tax returns. In this
16 case, the Company is estimating its gross receipts taxes for the attrition period
17 based on the actual gross receipts tax return filed in August 2009 and an estimated
18 gross receipts tax return that will be filed in August 2010. The first two months
19 of the attrition period (May and June 2010) will be covered by the 2009 return
20 and the remaining months (July 2010 – April 2011) will be covered by the 2010
21 return.

1 **Q. How did the Company estimate the financial information to be included in**
2 **the August 2010 gross receipts tax return?**

3 A. The Company estimated the financial information that will be included in the
4 2010 gross receipts tax return consistent with the manner in which the Company
5 files its actual gross receipts tax returns as follows:

- 6 • TRA Minimum Filing Guideline No. 25 includes the calculation of the
7 estimate and Guideline No. 60 includes gross receipts tax returns. The
8 revenues reported on line 1 of the return are based on the monthly revenues
9 reported in the Company's monthly sales tax returns. Since revenues for the
10 August 2010 return will be based on the twelve months ending September
11 2009, the Company used the actual revenues that will be filed in the 2010
12 return. The Company also incorporated any minor adjustments to revenues it
13 typically makes when preparing its gross receipts tax return.
- 14 • The Company based the franchise tax credit on the estimated franchise taxes
15 for calendar year 2009. The amount to be included as a credit for gross
16 receipts tax calculation purposes was based on the percentage of gross receipts
17 to total estimated revenues of CGC for the twelve months ended December
18 31, 2009.
- 19 • The Company based the excise tax credit on the estimated excise taxes for
20 calendar year 2009. The amount to be included as a credit for gross receipts
21 tax calculation purposes was based on the percentage of gross receipts to total
22 estimated revenues of CGC for the twelve months ended December 31, 2009.

1 **Q. How did the Company estimate its attrition period franchise and payroll**
2 **taxes?**

3 A. Franchise tax payments to the State of Tennessee are estimated based on a
4 percentage of assets, and payroll tax expense was based on a percentage of
5 attrition period payroll expense. The percentages used in both estimates were
6 based on the test year percentage applicable to each tax.

7
8 **Q. How did the Company estimate its attrition period franchise and TRA**
9 **inspection fees?**

10 A. Estimated franchise fee payments to the City of Chattanooga are based on the
11 expected continuation of the current terms of its franchise agreement. The TRA
12 inspection fee was estimated consistent with TCA Section 65-4-303.

13
14 **Q. Please explain the significant decrease of \$1,129,711 in the forecast of**
15 **property taxes from the test period to the attrition period.**

16 A. Effective for the 2008 tax year, property taxes decreased due to the settlement of
17 an appeal with the State of Tennessee which significantly decreased the value
18 assigned to CGC's property for property tax assessment. The property taxes
19 accrued during the test period were based on the higher value before the change in
20 valuation. The decrease in the tax liability as a percentage of total plant results in
21 a lower forecast of property taxes for the attrition period.

22
23 **II. DETERMINATION OF RATE BASE**

1 **Q. Would you summarize the information contained in Exhibit RDH-3,**
2 **Schedule 1 supporting the Company's calculation of base revenue**
3 **requirement?**

4 A. Exhibit RDH-3, Schedule 1 summarizes the attrition period forecast of the
5 Company's rate base, which includes plant in service, construction work in
6 progress (CWIP), postretirement benefits other than pensions (PBOP), working
7 capital, and certain deductions from rate base. The forecasted attrition period rate
8 base is \$97.8 million. The forecast is based on a 13 month average, which
9 normalizes rate base over the attrition period and takes into account any
10 fluctuations during the attrition period.

11
12 **Q. Please summarize the change between the test period and the attrition period**
13 **average rate base.**

14 A. The average rate base is expected to decrease from the test period to the attrition
15 period by approximately \$12.8 million. The first major component of the decrease
16 is the working capital requirement which is forecast to decrease by approximately
17 \$12.4 million, primarily due to a decrease in the average balance of stored gas
18 inventory. Gas stored inventory is expected to decrease due to a forecast of
19 decrease of average cost of gas held in inventory. The second major component of
20 the decrease is accumulated deferred income taxes which are expected to increase
21 by \$2.7 million due to expenditures on utility plant. These decreases are partly
22 offset by an increase in net utility plant in service of approximately \$2.5 million,
23 primarily due to capital expenditures to replace bare steel/cast iron pipe, normal

1 expansion of the Company's system, pressure improvement and other
2 expenditures.

3
4 **A. Utility Plant and Construction Work in Progress**

5 **Q. Please describe how you calculated the forecast of Utility Plant in Service and**
6 **Construction Work in Progress ("CWIP").**

7 A. The estimated average balance of utility plant in service for the attrition period of
8 \$198,761,734 was calculated starting with the actual balance as of June 30, 2009.
9 This balance was then projected through the end of the attrition period by adding
10 estimated plant additions and subtracting estimated plant retirements. The
11 additions for the months July 2009 through December 2009 are based on the
12 Company's capital forecast for the remainder of 2009. Additions for January
13 2010 through December 2010 are based on the Company's preliminary budget for
14 2010. Additions for January 2011 through April 2011 are based on a forecast
15 specifically prepared for this proceeding. Estimated retirements of plant are based
16 on the average retirements for the four years ended June 2009. The estimated
17 average balance of CWIP for the attrition period of \$4,655,182 was based on the
18 13 month average balance as of June 30, 2009, on the assumption that plant would
19 be placed in service at a rate consistent with the monthly capital expenditures
20 during 2010 and 2011.

21 The Company has also included in utility plant and CWIP an allocated portion of
22 AGSC attrition period forecasted average utility plant and CWIP. The forecast of
23 AGSC utility plant is based on a combination of forecasts and preliminary budget

1 data from the end of the test year through the attrition period and an estimate of
2 retirements based on historic experience. The forecast of AGSC CWIP is based
3 on the average balance for the test period.

4 The forecasted balance of AGSC attrition period utility plant and CWIP allocated
5 to CGC is based on the ratio of AGSC expenses allocated to CGC to total AGSC
6 expenses allocated to all AGSC affiliates. This ratio is 3.12%. Allocation of rate
7 base items from AGSC is necessary to reflect the investment made by AGSC in
8 providing services to CGC.

9
10 **B. PBOP Asset**

11 **Q. Please describe the PBOP asset and how it was calculated.**

12 A. The PBOP asset of \$302,798 represents the 13 month average of the balance of
13 the difference between annual incurred PBOP expense in accordance with SFAS
14 106 and payments made by the Company for retiree medical benefits.
15 Additionally, the PBOP balance was adjusted to exclude the impacts of Statement
16 of Financial Accounting Standard No. 158, "Employers' Accounting for Defined
17 Benefit Pension and Other Postretirement Plans" ("SFAS 158"). SFAS 158
18 requires that a company recognize in its financial statements the difference
19 between the accumulated postretirement benefits obligation ("ABO") and the plan
20 assets through a charge to other comprehensive income (equity) on the balance
21 sheet. As it relates to regulated entities, this difference represents the future costs
22 that will be recovered from customers through base rates. Excluding the impact of
23 SFAS 158 in determining the PBOP liability balance for regulatory purposes is

appropriate for CGC because the SFAS 158 impact represents future expenses that CGC will incur and recover from customers.

C. Working Capital Requirement

Q. Please explain the components of the working capital requirement and how each component was calculated.

A. The components of the estimated working capital requirement of \$14,910,913 for the attrition period are included in Schedules 2 and 3 of Exhibit RDH-3 and were calculated as follows:

Requirement for Lead-lag

The requirement for lead lag of \$1,244,263 was based on the lead lag study that was approved by the TRA in CGC's rate case in Docket No. 04-00034. There have been no significant changes to the Company's operations that would materially impact the lead lag study. The calculation of the requirement for lead lag is provided in Exhibit RDH-3, Schedule 3.

Materials and Supplies and Other Accounts Receivable

The materials and supplies inventory and other accounts receivable of \$19,623, and \$12,350, respectively, were calculated using a 13-month average for the test period, June 2008 through June 2009. The use of a 13 month average allows for the reflection of any seasonality of these accounts. The

1 historic balances were used as a proxy for a forecast because no better forecast
2 of these accounts existed.

3
4 **Stored Gas Inventory**

5 Stored gas inventory is estimated to be \$16,070,104 for the attrition period.
6 The starting point for the calculation of average stored gas inventory was the
7 actual volumes and dollar amounts of inventory as of August 31, 2009. These
8 balances were then projected monthly as follows: From September 2009
9 through April 2011, injections were forecast based on the Company's current
10 injection schedule, ratably April through October for two of the underground
11 storages, FSPA and FSMA, and liquefied natural gas storage and May through
12 September for CSS, the third underground storage. Injection volumes in each
13 year are based on the Company's March 31st ending balance and the targeted
14 storage levels entering the winter season. Injections are forecast and managed
15 by AGSC's Gas Supply service provider. Withdrawals were forecasted based
16 on the estimated need to utilize stored gas inventory during the winter season
17 while maintaining an adequate level of storage to mitigate any unseen
18 circumstances or events. Withdrawals are also forecast and managed by
19 AGSC's Gas Supply service provider.

20
21 Pricing for the injections was calculated using the NYMEX futures price for
22 natural gas as of October 21, 2009 plus the variable costs incurred to inject the
23 gas into the Company's storage facilities. Pricing for the withdrawals was

1 calculated using the monthly weighted average cost of gas, which was re-
2 calculated each month based on the applicable withdrawals, injections and
3 NYMEX futures price. Additionally, the cost of liquefaction and vaporization
4 was included in the calculation for the LNG storage facility. The thirteen
5 month average for the attrition period (April 2010 through April 2011) was
6 then calculated using the monthly projected balances of the stored gas
7 inventory.

8 9 **Deferred Rate Case Costs**

10 The deferred rate case costs represent the estimated external costs that have
11 been or will be incurred in this case including legal, depreciation study, class
12 cost of service, cost of equity and pension and PBOP forecast studies. Total
13 costs for the current case are estimated at \$548,640, which the Company
14 proposes to amortize over 3 years. Additionally, the Company is proposing to
15 amortize the remaining balance of rate case costs from its 2006 case over 3
16 years. The attrition period average of the unamortized costs is estimated to be
17 \$531,955.

18 19 **Reserve for Uncollectible Accounts**

20 The average reserve for uncollectible accounts of \$135,897 was calculated
21 using the ratio of the average historical reserve balance from July 2007
22 through June 2009 to the average historical operating margin for the same

1 period. This ratio was then applied to the estimated operating margin for the
2 attrition period.

3 4 **Customer Deposits and Related Accrued Interest**

5 Customer deposits of \$2,203,593 are based on the 13 month average balance
6 through the end of the test year, adjusted for growth using the 3-year average
7 growth for the three years ended June 2009. Accrued interest on customer
8 deposits was based on the average percentage of accrued interest to customer
9 deposits for the three years ending June 2009. This ratio was applied to the
10 forecasted level of customer deposits for the attrition period to arrive at an
11 estimated balance of interest on customer deposits for the attrition period of
12 \$627,905.

13 14 **Accumulated Depreciation**

15 Accumulated depreciation is estimated to be \$96,171,548 for the attrition
16 period. The balance of accumulated provision for depreciation was calculated
17 starting with the actual balance as of June 30, 2009. This balance was then
18 projected through the end of the attrition period by adding estimated
19 depreciation expense and subtracting estimated plant retirements and the net
20 cost of removal. Depreciation expense for July 2009 through April 2010 was
21 calculated by multiplying the average plant balances during those time periods
22 by the currently authorized rates. Depreciation expense for May 2010 through
23 April 2011 was calculated by multiplying the average plant balance for the 13

1 months ending April 2011 by the proposed depreciation rates from the
2 depreciation study supported by the direct testimony of Ms. Watts. Estimated
3 retirements are the same as those included in the estimate of utility plant in
4 service as described above. The cost of removal for the months July 2009
5 through December 2009 is based on the Company's capital forecast for the
6 remainder of 2009. Cost of removal for the months January 2010 through
7 April 2011 is based on the average cost of removal for the 4 years ended June
8 2009. Estimated salvage was included for vehicles retired through the end of
9 the attrition period. The Company has also included in accumulated
10 depreciation an allocated portion of AGSC forecasted average accumulated
11 depreciation during the attrition period. The forecast of AGSC accumulated
12 depreciation is based on estimated deprecation expense and retirements from
13 the end of the test year through the end of the attrition period. Depreciation
14 expense is based on the average rate for each plant account multiplied by the
15 average plant balances. Retirements are based on an average of historic
16 experience. The same factor of 3.12% used to allocate utility plant and CWIP
17 was then applied to the attrition period AGSC accumulated depreciation
18 estimate.

19
20 **Accumulated Deferred Income Tax**

21 The balance of accumulated deferred income tax ("ADIT") is estimated to be
22 \$22,851,051 for the attrition period. ADIT was calculated using the account
23 balances as of June 30, 2009 and then projecting through April 2011 for

1 changes to the components of the accumulated deferred income tax balances.
2 The primary component of the ADIT projection is the increase due to the
3 difference in tax depreciation and book depreciation through the end of the
4 attrition period. Tax and book depreciation were estimated based on the
5 existing property balances and estimated changes to those balances. The
6 difference multiplied by the income tax rates results in the change in ADIT.
7 The Company also estimated other ADIT items either based on specific
8 forecasts or historic experience. The Company has also included in ADIT an
9 allocated portion of AGSC forecasted average ADIT during the attrition
10 period. The forecast of AGSC ADIT is based on a percentage of ADIT to
11 plant during the test year multiplied by the estimated balance of plant during
12 the attrition period. The same factor of 3.12% used to allocate utility plant and
13 CWIP was then applied to the attrition period AGSC ADIT estimate.

14
15 **Contributions in Aid of Construction and Customer Advances for**
16 **Construction**

17 Consistent with the Federal Energy Regulatory Commission System of
18 Accounts, the Company includes contributions in aid of construction
19 (“CIAC”) as a reduction to plant balances. CGC included an estimate of CIAC
20 of \$31,624 for July through December 2009, \$108,796 for calendar 2010 and
21 \$41,032 for January through April 2011. The CIAC estimate is based on the
22 number of new customers to be added for a period. Before the adoption of the
23 FERC system of accounts, the Company recorded CIAC in a separate account

consistent with the then adopted NARUC system of accounts. The amount on line 7 of Schedule 1, Exhibit RDH-3 of \$1,561,644 is primarily the balance of CIAC related to the period prior to the FERC adoption. The Company does not expect a change to customer advances for construction and has based its estimate on the test year amount of \$286,394.

D. Cost of Capital

Q. Would you summarize the information contained in Exhibit RDH-4, Schedule 1 supporting the Company's Cost of Capital?

A. Exhibit RDH-4, Schedule 1 is the Summary of Estimated Cost of Capital as of April 30, 2011. Column 1 provides the capitalization ratios of each component of the capital structure. Column 2 provides the cost of each component of capital and column 3 provides the weighted average cost of capital.

Q. Would you explain how you calculated the proposed capital structure?

A. The Company's proposed capital structure is 42.15% long-term debt, 6.94% short-term debt and 50.90% equity. The calculations are shown on Exhibit RDH-4, Schedule 2. The first step in the determination of the capital structure was to determine the percentage of short-term debt. The percentage of short-term debt was based on the forecasted percentage of average short-term debt for the attrition period ending April 30, 2011 to total capitalization for AGL Resources Inc. as of April 30, 2011 excluding the effects of other comprehensive income ("OCI"). The

1 second step in the determination of the capital structure, which is summarized in
2 Exhibit RDH-4, page 2, was to determine the relative percentage of common
3 equity and long-term debt components of the capital structure. The percentage of
4 long-term components in the capital structure after deducting the short-term debt
5 was 93.06%. The relative percentage of the long-term components in the proposed
6 capital structure is 54.7% common equity, and 45.3% long-term debt, based on
7 the capital structure of the peer companies used in the direct testimony of Dr.
8 Roger Morin to develop his recommended return on equity. Multiplying the
9 common equity ratio of 54.7% and long-term debt ratio of 45.3% times the long-
10 term capitalization ratio of 93.06% results in common equity and long-term debt
11 ratios of 50.90% and 42.15%, respectively.

12
13 **Q. How and why was OCI excluded when calculating the percentage of short-**
14 **term debt to total capitalization for AGLR?**

15 A. As introduced in the discussion of the PBOP asset earlier in my testimony, SFAS
16 158 requires that a company recognize in its financial statements the difference
17 between the ABO and the plan assets of PBOP through a charge to other
18 comprehensive income (equity) on the balance sheet. SFAS 158 also requires the
19 same recognition for the difference between the projected benefit obligation and
20 the plan assets for pension plans. For regulated entities, this difference represents
21 the future costs that will be recovered from customers through base rates. Because
22 the costs represented in OCI have not been recovered through base rates, OCI was

1 excluded from the calculation of equity and total capitalization for AGLR in the
2 determination of the capital structure for CGC.

3
4 **Q. Please continue.**

5 A. CGC's recovery of pension plan costs is based on its pension plan contribution
6 amounts. The OCI amount recognized for pensions is the difference between the
7 liabilities in the pension plan and the assets in the plan. This difference represents
8 future contributions to the pension plan. It is not appropriate to recognize the effects
9 on equity of contributions not recovered by CGC. CGC's recovery of PBOP costs
10 are based on the FAS 106 recognized expense. The charges to OCI represent future
11 costs to be recovered through rates. It is not appropriate to recognize the effects on
12 expenses on equity of expenses not recovered by CGC.

13
14 **Q. How was the cost rate for short-term debt determined in Exhibit RDH-4,**
15 **Schedule 1?**

16 A. The estimated cost of short-term debt is based on AGLR's projected short-term
17 debt cost of its commercial paper program. The projected short-term debt cost
18 includes the monthly average of the forward curve for the London Inter-Bank
19 Offering Rate ("LIBOR") from May 2010 through April 2011, plus the estimated
20 spread between LIBOR and the commercial paper rate and the estimated rate on
21 bank facility fees and other short-term debt related costs. The average LIBOR
22 rate is projected to be 1.41%, the estimated commercial paper spread is 0.30% and

1 the estimated rate on bank facility fees and other short-term debt related costs is
2 0.33%, resulting in a total estimated short-term debt cost of 2.04%.

3
4 **Q. How was the cost of long-term debt in Exhibit RDH-4, Schedule 1**
5 **determined?**

6 A. The cost of long-term debt includes the cost of senior notes, revenue bonds and
7 medium-term notes within the consolidated capital structure of AGLR as of June
8 30, 2009 adjusted (1) for the issuance of \$300 million in senior notes in August
9 2009, the funds from which were used to reduce short-term debt, (2) for the
10 planned retirement of \$300 million in senior notes due in January 2011 and the
11 related planned issuance in January 2011 of \$300 million and (3) the amortization
12 of debt discount expense and loss on repurchase of debt. The cost of long-term
13 debt was also adjusted to include the impact of the change in the cost of currently
14 outstanding revenue bond issuances for (1) the change in variable rates and (2) the
15 expected change in cost resulting from the execution of letter of credit agreements
16 related to the revenue bonds in June and September 2010. A detailed calculation
17 of the estimated long-term debt cost rates is included in the Company's response
18 to TRA Minimum Filing Guideline No. 81.

19
20 **Q. How was the cost of common equity determined?**

21 A. The calculation of the cost of common equity of 11.0% is discussed in the pre-filed
22 direct testimony of Dr. Roger Morin.

1 **Q.** **Does this conclude your testimony?**

2 **A.** **Yes.**

Chattanooga Gas Company
Statement of Income with Proposed Rate Adjustment
Twelve Months Ended April 30, 2011 (Attrition Period)

Line No.	Description	1 Pro Forma Attrition Period	2 Proposed Rate Adjustments	3 Attrition Period with Rate Adjustment
1	Revenues - Sales of Gas	87,549,763	\$2,572,993 (A)	\$90,122,756
2	Cost of Gas	58,634,548		58,634,548
3	Base Revenues	28,915,215	2,572,993	31,488,208
4	Other Revenues	703,527	10,707 (B)	714,234
5	AFUDC	\$352,221	-	352,221
6	Total Operating Revenues	29,970,963	2,583,700	32,554,663
7	Operation and Maintenance Expense	12,022,380	23,235 (C)	12,045,615
8	Depreciation Expense	5,119,444	-	5,119,444
9	Interest on Customer Deposits	132,216	-	132,216
10	Taxes Other than Federal Income and State Excise	3,710,522	-	3,710,522
11	Income Taxes	2,446,083	1,004,400 (D)	3,450,482 (E)
12	Total Operating Expenses	\$23,430,643	\$1,027,634	\$24,458,277
13	Operating Income for Return	\$6,540,320	\$1,556,066	\$8,096,385
14	Rate Base	(F) \$97,759,990		\$97,759,990
15	Rate of Return	(G) 6.69%		8.28%

(A) RDH-1, Schedule 2, Line 10

(B) RDH-1, Schedule 2, Line 11 + RDH-1, Schedule 2, Line 14

(C) RDH-1, Schedule 2 Line 12 x RDH-1 Schedule 3, Line 4

(D) Line 11, Column 3 - Column 1

(E) RDH-1, Schedule 4, Line 22

(F) RDH-3, Schedule 1, Line 10

(G) Line 13/Line 14

Chattanooga Gas Company
Revenue Adjustment Calculation
For the Twelve Months Ending April 30, 2011 (Attrition Period)

<u>Line No.</u>		<u>Amount</u>	
1	Rate Base	\$97,759,990	(A)
2	Operating Income at Present Rates	6,540,320	(B)
3	Earned Rate of Return	6.69%	(C)
4	Proposed Rate of Return	8.28%	(D)
5	Required Operating Income	8,096,385	(E)
6	Operating Income Deficiency	1,556,065	(F)
7	Gross Revenue Conversion Factor	<u>165.353%</u>	(G)
8	Revenue Deficiency	<u>\$2,572,993</u>	
9	Components of Revenue Deficiency:		
10	Revenues - Sales of Gas	2,572,993	
11	Other Revenues	<u>-</u>	
12	Total Revenue Deficiency	<u>\$2,572,993</u>	
13	Forfeited Discount Ratio	0.4161%	(H)
14	Forfeited Discount	<u>\$10,707</u>	(I)

(A) RDH-3, Schedule 1, Line 10

(B) RDH-1 Schedule 1, Line 13, Column 1

(C) Line 2/Line 1

(D) RDH-4, Schedule 1, Line 5

(E) Line 4 x Line 1

(F) Line 5 - Line 2

(G) RDH-1 Schedule 3, Line 10

(H) RDH-1 Schedule 3, Line 2

(I) Line 12 * Line 13

**Chattanooga Gas Company
 Revenue Conversion Factor
 For the Twelve Months Ending April 30, 2011 (Attrition Period)**

<u>Line No.</u>	<u>Revenue Conversion Factor</u>	<u>Rate</u>	<u>Balance</u>
1	Operating Revenues		100.000%
2	Add: Forfeited Discount Ratio	0.4161% (A)	0.4161%
3	Balance		100.416%
4	Deduct: Uncollectible Ratio	<u>0.9030%</u> (A)	<u>0.009067849</u>
5	Balance		99.509%
6	Deduct: State Excise Tax Rate	6.5000% (B)	<u>0.064681068</u>
7	Balance		93.041%
8	Deduct: Federal Income Tax	35.0000% (B)	<u>32.56%</u>
9	Retention Factor		<u>60.477%</u>
10	Revenue Conversion Factor		<u>165.353%</u>

(A) Operating Expenses Workpapers

(B) Statutory Rates

Chattanooga Gas Company
Tennessee Excise and Federal Income Taxes
Twelve Months Ended April 30, 2011 (Attrition Period)

Line No.	Description	(A)	(A)
		Attrition Period at Current Rates	Attrition Period at Proposed Rates
1	Revenues - Sales of Gas	\$87,549,763	\$90,122,756
2	Cost of Gas	58,634,548	58,634,548
3	Base Revenues	28,915,215	31,488,208
4	Other Revenues	703,527	714,234
5	AFUDC	352,221	352,221
6	Total Operating Revenues	29,970,963	32,554,663
7	Operation and Maintenance Expense	12,022,380	12,045,615
8	Depreciation Expense	5,119,444	5,119,444
9	Interest on Customer Deposits	132,216	132,216
10	Taxes Other than Federal Income	3,710,522	3,710,522
11	Net Operating Income Before Interest and Income Taxes	\$8,986,402	\$11,546,868
12	Interest Expense	2,622,705	2,622,705 (B)
13	Net Income Before Income Taxes	\$6,363,697	\$8,924,163
14	Permanent Adjustments to Book Income	9,148	9,148
15	Net Taxable Income	6,372,845	8,933,311
16	Excise Tax Rate	6.50%	6.50%
17	Excise Tax	\$414,235	\$580,665
18	Federal Taxable Income	\$5,958,610	\$8,352,645
19	Federal Income Tax Rate	35%	35%
20	Federal Income Tax Expense	\$2,085,514	\$2,923,485
21	Amortization of Deferred Tax Liability - Federal	(35,585)	(35,585)
	Amortization of Deferred Tax Liability - State	(18,081)	(18,081)
22	Tennessee Excise and Federal Income Tax Expense	\$2,446,083	\$3,450,484

(A) RDH-1, Schedule 1, (except line 12 - see (B) below))

(B) (RDH-3, Schedule 1, Line 10 x RDH-4, Schedule 1, Line 1) + (RDH-3, Schedule 1, Line 10 x RDH-4, Schedule 1, Line 2)

Chattanooga Gas Company
Comparative Statements of Income
Twelve Months Ended June 30, 2009 (Test Period) and April 30, 2011 (Attrition Period)
(with Pro-Forma Adjustments)

Line No.	Description	(A) Test Period with Proforma Adjustments	Attrition Period	Increase (Decrease)
1	Revenues - Sales of Gas	\$105,909,066	\$87,549,763	(\$18,359,303)
2	Cost of Gas	75,813,208	58,634,548	(17,178,660)
3	Base Revenues	\$30,095,858	\$28,915,215	(\$1,180,643)
4	Other Revenues	763,481	703,527	(59,954)
5	AFUDC	245,151	352,221	107,070
6	Total Operating Revenues	\$31,104,490	\$29,970,963	(\$1,133,527)
7	Operation and Maintenance Expense	11,204,592 (B)	12,022,380 (B)	817,788
8	Depreciation Expense	6,429,569	5,119,444	(1,310,125)
9	Interest on Customer Deposits	125,298	132,216	6,918
10	Taxes Other than Income	4,783,646 (C)	3,710,522 (C)	(1,073,124)
11	Income Taxes	1,929,253	2,446,083	516,829
12	Total Operating Expenses	\$24,472,358	\$23,430,643	(\$1,041,715)
13	Operating Income	\$6,632,132	\$6,540,320	(\$91,812)
14	Non-Operating Income - Net	(32,741)	0	32,741
15	Income Before Interest	\$6,599,391	\$6,540,320	(\$59,071)
16	Interest Expense	3,670,228	2,622,705	(1,047,523)
17	Net Income	\$2,929,163	\$3,917,615	\$988,451

(A) RDH-2, Schedule 3 at corresponding line number, Column 3

(B) RDH-2, Schedule 2, Line 13

(C) RDH-2, Schedule 2, Line 22

Chattanooga Gas Company
Comparative Statements of Operations and Maintenance Expense and Taxes Other than Income
Twelve Months Ended June 30, 2009 (Test Period) and Twelve months Ended April 30, 2011 (Attrition Period)
(with Pro-Forma Adjustments)

Line No.	Description	Test Period	Attrition Period	Increase (Decrease)
	Operation and Maintenance Expenses			
1	Payroll Expenses	\$2,048,739	\$2,147,475	\$98,736
2	Employee Benefits	788,190	1,270,641	482,452
3	Benefits Capitalized	(46,367)	(101,369)	(55,002)
4	Fleet Services and Facilities Expense	844,524	861,624	17,100
5	Outside Services	1,706,740	1,468,230	(238,511)
6	Bad Debt Expenses	335,913	297,462	(38,451)
7	Sales Promotion Expense	22,549	23,006	457
8	Customer Service and Account Expense	5,176	5,280	104
9	Administrative and General Expenses	852,708	993,498	140,790
10	Admin & Gen. Salaries & Exp. Capitalized	(33,772)	(34,456)	(684)
11	Other Distribution and Storage Expense	495,824	574,178	78,354
12	AGL Services Company Allocations	<u>4,184,368</u>	<u>4,516,810</u>	<u>332,442</u>
13	Total Operation and Maintenance Expenses	<u>\$11,204,592</u>	<u>\$12,022,380</u>	<u>\$817,788</u>
14	Taxes Other than Income			
15	Property	\$2,857,314	\$1,727,603	(\$1,129,711)
16	Gross Receipts	922,124	698,074	(224,050)
17	Franchise Fees	589,980	666,172	76,192
18	TRA Inspection Fee	120,732	285,537	164,805
19	Payroll	177,065	206,959	29,894
20	Payroll taxes capitalized	(15,755)	(16,511)	(756)
21	Allocated Taxes Other than Income	132,186	142,688	10,502
22	Total Taxes Other than Income	<u>\$4,783,646</u>	<u>\$3,710,522</u>	<u>(\$1,073,124)</u>

Chattanooga Gas Company
Pro Forma Statement of Income
Twelve Months Ended June 30, 2009 (Test Period)

Line No.	Description	(1)	(2)	REF #	(3)
		Test Period	(A) Pro Forma Adjustments		Test Period with Pro Forma Adjustments
1	Revenues - Sales of Gas	\$105,909,066	-		\$105,909,066
2	Cost of Gas	75,813,208	-		75,813,208
3	Base Revenues	\$30,095,858	-		\$30,095,858
4	Other Revenues	763,481	-		763,481
5	AFUDC	-	245,151	3-1-1	245,151
6	Total Operating Revenues	\$30,859,339	\$245,151		\$31,104,490
7	Operation and Maintenance Expense	10,889,375	315,217	3-1-2	11,204,592
8	Depreciation Expense	6,429,569	-		6,429,569
9	Interest on Customer Deposits	125,298	-		125,298
10	Taxes Other than Federal Income	4,783,646	-		4,783,646
11	Income Taxes	2,317,632	(388,379)	3-1-3	1,929,253
12	Total Operating Expenses	\$24,545,519	(\$73,161)		\$24,472,358
13	Operating Income	\$6,313,819	\$318,312		\$6,632,132
14	Non-Operating Income - Net	115,001	(147,742)	3-1-4	(32,741)
15	Income Before Interest	\$6,428,821	\$170,570		\$6,599,391
16	Interest Expense	2,208,680	1,461,548	3-1-5	3,670,228
17	Net Income	\$4,220,141	(\$1,290,978)		\$2,929,163

(A) RDH-2, Schedule 4 by REF#

Chattanooga Gas Company
Explanation of Pro Forma Adjustments
Twelve Months Ended June 30, 2009 (Test Period)

Line No.	REF #	Explanation of Adjustment	Amount
1	3-1-1	Reclass of AFUDC from Non-Operating Income - Net to Operating Revenues. Offset reclass at 3-1-4 and 3-1-5.	\$245,151
2		Operation and Maintenance Expense	
3		Adjustment to exclude FAS 87 pension credit - Employee Benefits	545,726
4		Adjustment for recovery of pension costs based on estimated pension - Employee Benefits	37,744
5		Eliminate Civic Participation costs	(22,175)
6		Adjustment to compute bad debt expense based on write-offs	(230,431)
7		Eliminate Promotional expenses	(15,647)
8	3-1-2	Total Pro Forma Adjustment - Operation and Maintenance Expense	<u>315,217</u>
9		Income Taxes	
10		Adjustment to exclude AGSC and AGLR allocated tax	221,401
11		Adjustment to statutory tax rate	25,409
12		Adjustment for income taxes after adjustment for all pro-forma adjustments	<u>(658,727)</u>
		Income Tax - On Other Income	23,539
13	3-1-3	Total Pro-Forma Adjustment - Income Taxes	<u>(388,379)</u>
14		Non-Operating Income - Net	
15	3-1-4	Reclass of AFUDC from Non-Operating Income - Net to Operating Revenues. Offset reclass at 3-1-1.	(147,742)
16		Interest Expense	
17		Reclass of AFUDC from Non-Operating Income - Net to Operating Revenues. Offset reclass at 3-1-1.	97,409
18		Adjustment for interest synchronization.	<u>1,364,139</u>
19	3-1-5	Total Pro Forma Adjustment - Interest Expense	<u>\$1,461,548</u>

Chattanooga Gas Company
Average Rate Base
For the Twelve Months Ending April 30, 2011 (Attrition Period)

<u>Line No.</u>		<u>Attrition Period</u>	
1	Utility Plant in Service	\$198,761,734	(A)
2	Construction Work In Progress	4,655,182	(A)
3	Postretirement Benefits Other than Pensions	302,798	(A)
4	Working Capital Requirement	<u>14,910,913</u>	(B)
		\$218,630,627	
	Less:		
5	Accumulated Provision For Depreciation	\$96,171,548	(A)
6	Accumulated Deferred Income Taxes	22,851,051	(A)
7	Contributions in Aid of Construction	1,561,644	(A)
8	Customer Advance For Construction	286,394	(A)
9	Total Deductions	<u>\$120,870,637</u>	
10	Rate Base	<u>\$97,759,990</u>	

(A) Rate base work papers

(B) RDH-3, Schedule 2, Line 11

Chattanooga Gas Company
Working Capital Requirement
For the Twelve Months Ending April 30, 2011 (Attrition Period)

<u>Line No.</u>		<u>Attrition Period</u>
1	Requirement For Lead Lag	\$1,244,276
2	Materials and Supplies	19,623
3	Stored Gas Inventory	16,070,104
4	Other Accounts Receivable	12,350
5	Deferred Rate Case	<u>531,955</u>
6	Total Additions	\$17,878,307
7	Reserve for Uncollectibles Accounts	\$135,897
8	Customer Deposits	2,203,593
9	Accrued Interest on Customer Deposits	<u>627,905</u>
10	Total Deductions	<u>\$2,967,394</u>
11	Working Capital Requirement	<u>\$14,910,913</u>

Chattanooga Gas Company
Lead Lag Requirement After Revenue Adjustment
For the Twelve Months Ending April 30, 2011 (Attrition Period)

Docket No. _____
Exhibit RDH-3
Schedule 3

Line No.		Required Income		
		Statement Attrition Period	Lag Days	\$ Days
1	Revenues	\$ 91,189,211	46.05	4,199,263,164
2	Gas Purchased	\$ 58,634,548	39.66	2,325,446,174
3	Salary and Wages	2,147,475	12.00	25,769,706
4	Pension	638,744	166.56	106,389,201
5	Postretirement Benefits Other than Pensions	103,277	-	-
6	Insurance Expense	299,120	-	-
7	Allocated Cost	4,516,810	38.71	174,845,726
8	Uncollectibles	297,462	-	-
9	Other Operating	4,042,726	34.64	140,040,015
10	Depreciation and Amortization	5,119,444	-	-
11	Taxes - Other Than Income Tax	3,710,522	177.78	659,656,559
12	SIT Current	345,450	59.25	20,467,919
13	SIT Deferred	217,134	-	-
14	FIT Current	2,065,310	37.75	77,965,445
15	FIT Deferred	822,590	-	-
16	Interest on Customer Deposits	132,216	-	-
17	Interest ST Debt	138,526	(23.34)	(3,233,195)
18	Interest LT Debt	2,484,179	93.38	231,972,645
19	Equity Return	5,473,679	-	-
20	Total Operating Funds	<u>\$ 91,189,211</u>	<u>41.23</u>	<u>\$ 3,759,320,194</u>
21	Net Lead (Lag) Days		4.825	
22	Average Daily Operating Expenses			\$ 249,833
23	CWC Required for Operating Expenses			1,205,323
24	Tax Collections Withheld			38,953
25	Net Cash Working Capital Provided			<u>\$ 1,244,276</u>

Chattanooga Gas Company
Summary of Estimated Consolidated Cost of Capital
Test Period - 12 Months Ended June 30, 2009

Docket No. _____
Exhibit RDH-4
Schedule 1

<u>Line No.</u>	<u>Capital Structure Component</u>	<u>Ratio</u>	<u>Cost Rate</u>	<u>Weighted Average Cost</u>
1	Short-term debt	6.94% (A)	2.04%	0.14%
2	Long-Term Debt	42.15% (B)	6.03%	<u>2.54%</u>
3	Total Debt	<u>49.10%</u>		2.68%
4	Common Equity	50.90% (C)	11.00%	5.60%
5	Total Capitalization	<u><u>100.00%</u></u>	<u><u> </u></u>	<u><u>8.28%</u></u>

(A) Based on average outstanding short-term debt for the test period

(B) RDH-4, Schedule 2, Line 4

(C) RDH-4, Schedule 2, Line 4

Chattanooga Gas Company
Estimated Consolidated Cost of Capital - Capitalization by Long-Term Component
Attrition Period - 12 Months Ended April 30, 2011

Docket No. RDH-4
Exhibit
Schedule 2

<u>Line No.</u>				
	Proposed Long-term Capitalization Structure:			
1	Long Term Debt		45.30%	
2	Common Equity		54.70%	
3	Capital Structure excluding short-term debt		93.06%	
		Long-Term Capitalization		
		Long-Term Debt		Common Equity
4	Proposed Capitalization Structure	42.15%	(A)	50.90% (B)
(A)	Line 1 x Line 3			
(B)	Line 2 x Line 3			