

**IN THE TENNESSEE PUBLIC UTILITY COMMISSION
AT NASHVILLE, TENNESSEE**

IN RE:)	
)	
CHATTANOOGA GAS COMPANY)	
PETITION FOR APPROVAL OF AN)	DOCKET NO. 18-00017
ADJUSTMENT IN RATES AND)	
TARIFF; THE TERMINATION OF THE)	
AUA MECHANISM AND THE)	
RELATED TARIFF CHANGES AND)	
REVENUE DEFICIENCY RECOVERY;)	
AND AN ANNUAL RATE REVIEW)	
MECHANISM)	

**SUPPLEMENT TO FIRST DISCOVERY REQUEST
OF THE CONSUMER PROTECTION AND ADVOCATE DIVISION
TO CHATTANOOGA GAS COMPANY**

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This Supplement to the First Discovery Request is hereby served upon Chattanooga Gas Company pursuant to Rules 26, 33, 34 and 36 of the Tennessee Rules of Civil Procedure and Tenn. Comp. R. & Reg. 1220-1-2-.11. The Consumer Protection and Advocate Division of the Attorney General's Office (Consumer Advocate) requests that full and complete responses be provided pursuant to the Tennessee Rules of Civil Procedure. The responses are to be produced at the Office of the Tennessee Attorney General and Reporter, Consumer Protection and Advocate Division, 315 Deaderick Street, 20th Floor, Nashville, Tennessee 37243, c/o Wayne M. Irvin, on or before 4:00 p.m. (CDT), April 20, 2018, or at such other time as may be ordered by the Hearing Officer in the adoption or approval of a procedural schedule in this TPUC Docket.

PRELIMINARY MATTERS AND DEFINITIONS

These supplemental discovery requests incorporate the same Preliminary Matters and Definitions set forth in the *First Discovery Request of the Consumer Protection and Advocate Division to Tennessee Chattanooga Gas Company* filed March 20, 2018, and are to be considered continuing in nature, and are to be supplemented from time to time as information is received by CGC and any CGC affiliate which would make a prior response inaccurate, incomplete, or incorrect. Further, to the extent that some responses may contain confidential information, clearly and conspicuously mark those responses that CGC asserts are confidential and separate these responses from the public filing. CGC shall also comply with any other requirements in the Protective Order.

SUPPLEMENTAL DISCOVERY REQUESTS TO THE CONSUMER ADVOCATE'S FIRST DISCOVERY REQUESTS

REVENUE REQUESTS

1-199. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting

data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column B of this spreadsheet (labeled as Average Cycle Billed Days per Month) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-200. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column D of this spreadsheet (labeled as SDD 55) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-201. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column E of this spreadsheet (labeled as SDD 65) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-202. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column F of this spreadsheet (labeled as SDD 72) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-203. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column G of this spreadsheet (labeled as SDD 80) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-204. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column H of this spreadsheet (labeled as Monthly Sales Temp) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-205. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column I of this spreadsheet (labeled as SDD55MRD) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-206. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting

data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column J of this spreadsheet (labeled as SDD65MRD) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-207. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column K of this spreadsheet (labeled as SDD72MRD) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-208. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column L of this spreadsheet (labeled as SDD80MRD) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-209. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column M of this spreadsheet (labeled as Knot5565) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-210. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column N of this spreadsheet (labeled as Knot5572) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-211. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column O of this spreadsheet (labeled as Knot5580) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-212. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column P of this spreadsheet (labeled as Knot5565MRD) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-213. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting

data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column Q of this spreadsheet (labeled as Knot5572MRD) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-214. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column R of this spreadsheet (labeled as Knot5580) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-215. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column S of this spreadsheet (labeled as Residential R-1 Customers) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-216. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column T of this spreadsheet (labeled as Residential Multimeter) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-217. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column U of this spreadsheet (labeled as C-1, C-2 & T-3) from January 2000 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-218. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column W of this spreadsheet (labeled as C1 Cust Count) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-219. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column X of this spreadsheet (labeled as Includes C-2 and T-3) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-220. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting

data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column Y of this spreadsheet (labeled as Residential Volume in Therms) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-221. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column Z of this spreadsheet (labeled as Residential Multimeter Volume) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-222. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AA of this spreadsheet (labeled as Commercial Volume in Therms) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-223. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AB of this spreadsheet (labeled as C1 Volume) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-224. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AC of this spreadsheet (labeled as Includes C-2 and T-3) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-225. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AD of this spreadsheet (labeled as Res Avg UPC per MRD) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-226. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AE of this spreadsheet (labeled as Res Multimeter AC) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-227. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the

information contained in Column AF of this spreadsheet (labeled as Com Avg UPC per MRD) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-228. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AG of this spreadsheet (labeled as C1 Avg UPC per MRD) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-229. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AH of this spreadsheet (labeled as C2 Avg UPC per MRD) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-230. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AI of this spreadsheet (labeled as PGA R1) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-231. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AJ of this spreadsheet (labeled as RPGA R1) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-232. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AK of this spreadsheet (labeled as Mood's Chat CPI) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-233. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AL of this spreadsheet (labeled as C2PGA) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-234. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the

information contained in Column AM of this spreadsheet (labeled as RC2PGA) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-235. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AN of this spreadsheet (labeled as C1PGA) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-236. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AO of this spreadsheet (labeled as RC1PGA) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-237. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AP of this spreadsheet (labeled as Unemployment Rate) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-238. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AQ of this spreadsheet (labeled as Retail Sales) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-239. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AR of this spreadsheet (labeled as LeadingFRB) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-240. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AS of this spreadsheet (labeled as Employment) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-241. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the

information contained in Column AT of this spreadsheet (labeled as C2 Consumption Excluding T-3) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-242. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AU of this spreadsheet (labeled as C2 Customer Excluding T-3) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-243. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AV of this spreadsheet (labeled as C2 Avg UPC No T3) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-244. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AW of this spreadsheet (labeled as R4 Billing Units) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-245. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AX of this spreadsheet (labeled as Res R4 Consumption per Unit) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-246. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29F" tab of this spreadsheet that provides supporting data for the Company's forecasted usage per customer. Provide the source and support for the information contained in Column AY of this spreadsheet (labeled as NYMEX) from February 2007 through November 2017 that is presented as a hard-coded number.

RESPONSE:

1-247. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29B" tab of this spreadsheet that provides the residential regression coefficients and statistics and provide the following information.

- a. Provide the source and support for the dependent and independent observed variable data by month that produces the regression coefficients (X_0 , X_2 , X_4 , X_5 and X_6).
- b. Provide support for the data used to plot the graph included on this spreadsheet.
- c. Provide an explanation of the "Truncated Feb 2004" designation in this regression equation.

RESPONSE:

1-248. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29C" tab of this spreadsheet that provides the master commercial regression coefficients and statistics and provide the following information.

- a. Provide the source and support for the dependent and independent observed variable data by month that produces the regression coefficients (X_0 , X_1 , X_4 , X_5 , X_7 and X_9).
- b. Provide support for the data used to plot the graph included on this spreadsheet.
- c. Provide an explanation of the "Truncated Feb 2004" designation in this regression equation.
- d. Define the classification "Master Commercial" as it is used here and how it is distinguished from tariffs C-1 and C-2.

RESPONSE:

1-249. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29D" tab of this spreadsheet that provides the C-1 regression coefficients and statistics and provide the following information.

- a. Provide the source and support for the dependent and independent observed variable data by month that produces the regression coefficients (X_0 , X_1 , X_5 , X_9 and X_{10}).
- b. Provide support for the data used to plot the graph included on this spreadsheet.
- c. Provide an explanation of the "Truncated Feb 2008" designation in this regression equation.

RESPONSE:

1-250. Refer to the spreadsheet included with the Company's response to MFG 29 regarding support statistics. Specifically refer to the "MFG 29E" tab of this spreadsheet that provides the C-2 regression coefficients and statistics and provide the following information.

- a. Provide the source and support for the dependent and independent observed variable data by month that produces the regression coefficients (X_3 , X_4 , X_5 , X_6 , X_9 and X_{11}).
- b. Explain the absence of a constant variable (X_0) in the equation.

- c. Provide support for the data used to plot the graph included on this spreadsheet.
- d. Provide an explanation of the “Truncated Feb 2008” designation in this regression equation.

RESPONSE:

1-251. Refer to the spreadsheet included with the Company’s response to MFG 29 regarding support statistics. Specifically refer to the “PGA Study” (MFG 29G) tab of this spreadsheet that provides the PGA regression coefficients and statistics and provide the following information.

- a. Provide the source and support for the dependent and independent observed variable data by month that produces the regression coefficients (NYMEX[-1], NYMEX[-2], PGA[-1], C2PGA[-1], and _CONST).
- b. Provide support for the data used to plot the graphs included on this spreadsheet.

RESPONSE:

1-252. Refer to Page 8, Lines 3 - 6 of the direct testimony of Company witness Brooks where he states, “The cubic spline allows the Company to more accurately forecast for spring and fall usage (“shoulder months”) when there is considerable variability between warm and cold weather and when consumption is no longer a linear function.” Provide the source and support for Mr. Brook’s statement that this forecasting methodology is “more accurate”.

RESPONSE:

1-253. Refer to Page 8 of the direct testimony of Company witness Brooks where he discusses his adoption of a cubic spline for weather normalization. Has the TPUC ever adopted the use of a cubic spline for weather normalization in a rate case for any utility? If so, provide a cite to the Commission Orders adopting this methodology.

RESPONSE:

1-254. Refer to Page 9, Lines 11 - 13 of the direct testimony of Company witness Brooks where he states, "A monthly forecast of new customers by class was developed from historical trends as well as coordination with the Company Marketing and Sales Departments." Provide all communication from the "Company Marketing and Sales Departments" that was used to develop a monthly forecast for new customers.

RESPONSE:

1-255. Refer to Page 11, Lines 6 - 9 of the direct testimony of Company witness Brooks where he states, "The forecast by individual customer was prepared by reviewing historical monthly consumption data and adjusting for future known changes in demand resulting from customer expansions and contractions and customer loss." Provide all documentation for "known changes" to industrial customer demand including customer correspondence regarding changes in consumption, establishment of new customers and closing of existing customers from January 2017 through December 2019.

RESPONSE:

1-256. Refer to Page 11, Lines 15 - 16 of the direct testimony of Company witness Brooks where he discusses the change in the revenue model since the 2009 rate case. Was the Company's revenue model adopted by the Commission in the 2009 rate case? If so, cite the specific section of the order from the 2009 rate case where the Commission explicitly adopted the Company's revenue model.

RESPONSE:

1-257. Refer to Page 12, Lines 21 - 22 of the direct testimony of Company witness Brooks where he states, "A fitting variable ("Feb17") has been added to adjust for a prior period adjustment

taking place February 2017.” Explain and fully document the adjustments for this “fitting variable”.

RESPONSE:

1-258. Refer to the spreadsheet included with the Company’s response to MFG 34-1 regarding normalized test year sales volumes that are included here as hard-coded amounts. Provide the source and support for all information in this spreadsheet.

RESPONSE:

1-259. Refer to the spreadsheet (including hidden worksheet tabs) included with the Company’s response to MFG 34-2A regarding the Company’s proposed WNA factors. Provide the source and support for the “Attrition Period Winter Consumption” and the “Attrition Period Normalized Distribution Revenues” that are included as hard-coded numbers on the “Workpaper” (hidden) tab of this spreadsheet.

RESPONSE:

1-260. Refer to the spreadsheet (including hidden worksheet tabs) included with the Company’s response to MFG 34-2A regarding the Company’s proposed WNA factors. Specifically refer to the “Residential R1” (hidden) tab of this spreadsheet that provides the Residential regression coefficients and statistics for the Company’s proposed WNA and provide the following information.

- a. Provide the source and support for the dependent and independent observed variable data by month that produces the regression coefficients that are presented here as hard-coded amounts.
- b. Explain the Company’s rationale of using one regression calculation to compute normalized residential sales volumes (as shown on MFG 29B) and then using a separate regression calculation in MFG 34-2A to compute the proposed residential WNA factor.

RESPONSE:

1-261. Refer to the spreadsheet (including hidden worksheet tabs) included with the Company's response to MFG 34-2A regarding the Company's proposed WNA factors. Specifically refer to the "Residential R4" (hidden) tab of this spreadsheet that provides the Multi-Family regression coefficients and statistics for the Company's proposed WNA and provide the following information.

- a. Provide the source and support for the dependent and independent observed variable data by month that produces the regression coefficients that are presented here as hard-coded amounts.
- b. Explain the Company's rationale of using one regression calculation to compute normalized multi-family sales volumes (as shown on MFG 29C) and then using a separate regression calculation in MFG 34-2A to compute the proposed multi-family WNA factor.

RESPONSE:

1-262. Refer to the spreadsheet (including hidden worksheet tabs) included with the Company's response to MFG 34-2A regarding the Company's proposed WNA factors. Specifically refer to the "C-1" (hidden) tab of this spreadsheet that provides the C-1 Commercial regression coefficients and statistics for the Company's proposed WNA and provide the following information.

- a. Provide the source and support for the dependent and independent observed variable data by month that produces the regression coefficients that are presented here as hard-coded amounts.
- b. Explain the Company's rationale of using one regression calculation to compute normalized C-1 commercial sales volumes (as shown on MFG 29D) and then using a separate regression calculation in MFG 34-2A to compute the proposed C-1 commercial WNA factor.

RESPONSE:

1-263. Refer to the spreadsheet (including hidden worksheet tabs) included with the Company's response to MFG 34-2A regarding the Company's proposed WNA factors. Specifically refer

to the “C-2” (hidden) tab of this spreadsheet that provides the C-2 Commercial regression coefficients and statistics for the Company’s proposed WNA and provide the following information.

- a. Provide the source and support for the dependent and independent observed variable data by month that produces the regression coefficients that are presented here as hard-coded amounts.
- b. Explain the Company’s rationale of using one regression calculation to compute normalized C-1 commercial sales volumes (as shown on MFG 29E) and then using a separate regression calculation in MFG 34-2A to compute the proposed C-2 commercial WNA factor.

RESPONSE:

1-264. Refer to the spreadsheet included with the Company’s response to MFG 25 for the Rate Case Revenue Model. Specifically refer to the “Industrial Consumption” tab of this spreadsheet. Provide the source and support for the monthly forecasted sales volumes on this spreadsheet from January 2018 through December 2018 (Columns AJ to AU) that are presented as hard-coded amounts.

RESPONSE:

1-265. Refer to Page 13, Lines 20 - 21 of the direct testimony of Company witness Brooks where he discusses the change in the other revenue related to damage billing. Provide a detailed description and explanation of the circumstances causing “abnormally high damage billing revenues in the test period” that Mr. Brooks describes in his testimony.

RESPONSE:

1-266. Refer to Page 13, Lines 22 - 23 of the direct testimony of Company witness Brooks where he discusses the change in the other revenue related to miscellaneous receipts. Provide a detailed

description and explanation of the services provided by Pivotal Home Solutions. In addition, provide a copy of the Company's contract with Pivotal Home Solutions.

RESPONSE:

1-267. Explain how LNG Sales, either directly by Chattanooga Gas or indirectly by Southern Company Gas or Sequent, are captured as revenues on the books of Chattanooga Gas.

RESPONSE:

1-268. Refer to the Commission's November 8, 2010 Order in the Company's last rate case (Docket No. 09-00183). Specifically refer to pages 14 – 15 of this Order related to Revenues which reads as follows:

The parties stipulated to the amounts for Base Revenues, Other Revenues, and Cost of Gas. In rebuttal testimony, the Company accepted the Consumer Advocate's forecast of operating revenues and cost of gas as a reasonable update, even though it did not agree with the method used to compute the amount. The panel voted unanimously to adopt the agreed upon revenue amounts as follows:

The Base Revenues were determined by the TRA to be \$29,028,086 based on the Consumer Advocate's updated billing determinates and current rates.

A review of the Consumer Advocate's testimony, exhibits and workpapers in Docket No. 09-00183 reveals that no adjustment was made for weather normalization. Given that the Commission accepted the Consumer Advocate's calculation of revenues, which included no provision for weather normalization, explain the Company's continual WNA surcharge for R-4 and C-2 customers since the Company's last rate case (Docket No. 09-00183), most recently in TPUC Docket No. 17-00062.

RESPONSE:

RATE BASE REQUESTS

1-269. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-1" tab of this spreadsheet that provides supporting data for the Company's forecasted plant in service. Provide the source and support for the plant additions contained in Column E of this spreadsheet that are presented as hard-coded numbers and do not appear to trace to MFG 65 as described in footnote b.

RESPONSE:

1-270. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-1" tab of this spreadsheet that provides supporting data for the Company's forecasted plant in service. Provide the source and support for the plant retirements contained in Column G of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-271. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-1" tab of this spreadsheet that provides supporting data for the Company's forecasted plant in service. Affirm that the December 2016 to December 2017 actual plant balances shown in Column K of this spreadsheet that are presented as hard-coded numbers represent the sum of the balances in Accounts 100100 and 100110 from GL8 as shown in MFR 23-1.

RESPONSE:

1-272. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-1" tab of this spreadsheet that provides supporting data for the Company's forecasted plant in service. Provide the source and support for the

allocated plant amounts contained in Column M of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-273. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-2" tab of this spreadsheet that provides supporting data for the Company's forecasted CWIP. Provide the source and support for the capital expenditures contained in Column E of this spreadsheet that are presented as hard-coded numbers and do not appear to trace to MFG 65 as described in footnote b.

RESPONSE:

1-274. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-2" tab of this spreadsheet that provides supporting data for the Company's forecasted CWIP. Provide the source and support for the closures contained in Column G of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-275. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-2" tab of this spreadsheet that provides supporting data for the Company's forecasted CWIP. Affirm that the December 2016 to December 2017 actual CWIP balances shown in Column I of this spreadsheet that are presented as hard-coded numbers represent the sum of the balances in Accounts 100120 and 100121 from GL8 as shown in MFR 23-1.

RESPONSE:

1-276. Refer to the spreadsheet included with the Company's response to MFG 23-1 regarding the trial balance for Chattanooga Gas Company. Explain why Account 100123-Utility CWIP Accrual is not included in the Company's calculation of CWIP.

RESPONSE:

1-277. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-2" tab of this spreadsheet that provides supporting data for the Company's forecasted CWIP. Provide the source and support for the "AGSC allocated CWIP" of \$881,194 in Cell I45 of this spreadsheet that is presented as a hard-coded number.

RESPONSE:

1-278. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-9" tab of this spreadsheet that provides supporting data for the Company's forecasted accumulated depreciation. Provide the source and support for the depreciation expense amounts contained in Column E of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-279. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-9" tab of this spreadsheet that provides supporting data for the Company's forecasted accumulated depreciation. Provide the source and support for the net cost of removal amounts contained in Column I of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-280. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-9" tab of this spreadsheet that provides supporting data for the Company's forecasted accumulated depreciation. Affirm that the December 2016 to December 2017 actual reserve balances shown in Column M of this spreadsheet that are presented as hard-coded numbers represent the sum of the balances in Accounts 100200 and 100220 from GL8 as shown in MFR 23-1.

RESPONSE:

1-281. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-9" tab of this spreadsheet that provides supporting data for the Company's forecasted accumulated depreciation. Provide the source and support for the allocated accumulated depreciation contained in Column O of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-282. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-8 Pg 2 of 5" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT. Provide the source and support for the federal and state amounts contained in Columns C and D of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-283. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-8 Pg 3 of 5" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT. Provide the source and support for the

federal and state amounts contained in Columns C, D, G, H, K and L of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-284. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-8 Pg 5 of 5" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT. Provide the source and support for the AGSC Property Related ADIT – December 2017 of \$-13,200,857 contained in Cell C12 of this spreadsheet that is presented as a hard-coded number.

RESPONSE:

1-285. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-8 Pg 5 of 5" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT. Provide the source and support for the AGSC Plant-in-Service – December 2017 of \$118,930,665 contained in Cell C14 of this spreadsheet that is presented as a hard-coded number.

RESPONSE:

1-286. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-8 Pg 5 of 5" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT. Provide the source and support for the Average Service Company Plant – June 2019 of \$135,514,205 contained in Cell C18 of this spreadsheet that is presented as a hard-coded number.

RESPONSE:

1-287. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-8 Pg 5 of 5" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT. Provide the source and support for the AGSC Cost Allocation Factor of 1.9% contained in Cell C22 of this spreadsheet that is presented as a hard-coded number.

RESPONSE:

1-288. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-13" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT related to the Tax Cuts & Jobs Act. Provide the source and support for the Protected Regulatory Liability at December 2017 of \$-21,683,789 contained in Cell C11 of this spreadsheet that is presented as a hard-coded number.

RESPONSE:

1-289. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-13" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT related to the Tax Cuts & Jobs Act. Provide the source and support for the ADIT on Protected Reg Liability at December 2017 of \$5,667,058 contained in Cell E11 of this spreadsheet that is presented as a hard-coded number.

RESPONSE:

1-290. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-13" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT related to the Tax Cuts & Jobs Act. Provide the source and support for the UnProtected Regulatory Liability at December 2017 of \$-19,923 contained in Cell G11 of this spreadsheet that is presented as a hard-coded number.

RESPONSE:

1-291. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-13" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT related to the Tax Cuts & Jobs Act. Provide the source and support for the ADIT on UnProtected Regulatory Liability at December 2017 of \$5,207 contained in Cell I11 of this spreadsheet that is presented as a hard-coded number.

RESPONSE:

1-292. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-13" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT related to the Tax Cuts & Jobs Act. Provide the source and support for the 2018 and 2019 Amortization of the Protected Regulatory Liability of \$594,495 and \$591,303 respectively and contained in Cells C33 and C34 of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-293. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-13" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT related to the Tax Cuts & Jobs Act. Provide the source and support for the 2018 and 2019 Amortization of the ADIT on Protected Regulatory Liability of \$-155,371 and \$-154,537 respectively and contained in Cells E33 and E34 of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-294. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-13" tab of this spreadsheet that provides supporting

data for the Company's forecasted ADIT related to the Tax Cuts & Jobs Act. Provide the source and support for the 2018 and 2019 Amortization of the UnProtected Regulatory Liability of \$3,985 and \$3,985 respectively and contained in Cells G33 and G34 of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-295. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-13" tab of this spreadsheet that provides supporting data for the Company's forecasted ADIT related to the Tax Cuts & Jobs Act. Provide the source and support for the 2018 and 2019 Amortization of the ADIT on UnProtected Regulatory Liability of \$-1,041 and \$-1,041 respectively and contained in Cells I33 and I34 of this spreadsheet that are presented as hard-coded numbers.

RESPONSE:

1-296. Refer to Exhibit RDJ 2-1, Page 1 of 3 that was included with the Company's filing regarding Average Rate Base. Specifically refer to "Line 7 Reg. Liability -- Excess Deferreds" of \$21,105,662 from this Exhibit. Provide the source and support for this amount that does not appear to trace to MFG 69-13 as described in footnote f.

RESPONSE:

1-297. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-12 Pg 1 of 11" tab of this spreadsheet that provides supporting data for the Company's forecasted Pension & OPEB balances and provide the following information.

- a. Explain why Account 202011 – Tax Expense/(Benefit) on Actuarial G/L is omitted.
- b. Explain why Account 202013 – Tax Expense on Actuarial Reclass is omitted.

- c. Explain why Account 202015 – Tax Expense on Prior Service Cost is omitted.
- d. Explain why Account 202017 – Tax Expense on R/C of PSC to NI is omitted.

RESPONSE:

1-298. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-12 Pg 2 of 11" tab of this spreadsheet that provides supporting data for the Company's forecasted Pension & OPEB balances and provide the following information.

- a. Reconcile the December 2017 balances on this spreadsheet with the December 2017 balances reported on the "MFG 69-12 Pg 1 of 11" tab.
- b. Identify where the Company takes the tax items on this schedule (Accounts 202011, 202013, 202015 and 202017) into account within the cost of service calculation.

RESPONSE:

1-299. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-12 Pg 3 of 11" tab of this spreadsheet that provides supporting data for the Company's forecasted Pension & OPEB balances at December 31, 2017 and provide the following information.

- a. Provide the source and support for the amounts shown for GL29 of AGL.
- b. Provide the source and support for the amounts allocated to Chattanooga along with the derivation of allocation formulas.
- c. Provide a schedule showing all amounts for all ledgers of all business units.
- d. Provide a copy of the January 25, 2018 letter titled "Southern Company Gas Balance Sheet Allocation as of December 31, 2017" that is referenced at the bottom of this spreadsheet.
- e. Provide a complete explanation of the note at the bottom of this spreadsheet stating that "Asset allocation per trustee based on historical source does not reflect IRC 414(I) or

ERISA 4044 allocation of assets. In addition, identify which business unit or ledger this asterisk (“*”) is intended to identify.

- f. Provide a copy of the “Statement of Financial Position” that the net amount of AGL Business Unit cost is reconciled with according the bottom line for the top and bottom halves of this spreadsheet.

RESPONSE:

1-300. Refer to the spreadsheet included with the Company’s response to MFG 69 regarding account balances. Specifically refer to the “MFG 69-12 Pg 4 of 11” tab of this spreadsheet that provides supporting data for the Company’s forecasted Pension & OPEB balances at December 31, 2018 and provide the following information.

- a. Provide the source and support for the amounts shown for GL29 of AGL.
- b. Provide the source and support for the amounts allocated to Chattanooga along with the derivation of allocation formulas.
- c. Provide a schedule showing all amounts for all ledgers of all business units.
- d. Provide a complete explanation of the note at the bottom of this spreadsheet stating that “Asset allocation per trustee based on historical source does not reflect IRC 414(I) or ERISA 4044 allocation of assets. In addition, identify which business unit or ledger this asterisk (“*”) is intended to identify.
- e. Provide a copy of the “Statement of Financial Position” that the net amount of AGL Business Unit cost is reconciled with according the bottom line for the top and bottom halves of this spreadsheet.

RESPONSE:

1-301. Refer to the spreadsheet included with the Company’s response to MFG 69 regarding account balances. Specifically refer to the “MFG 69-12 Pg 5 of 11” tab of this spreadsheet that provides supporting data for the Company’s forecasted Pension & OPEB balances at June 30, 2019 and provide the following information.

- a. Provide the source and support for the amounts shown for GL29 of AGL.

- b. Provide the source and support for the amounts allocated to Chattanooga along with the derivation of allocation formulas.
- c. Provide a schedule showing all amounts for all ledgers of all business units.
- d. Provide a complete explanation of the note at the bottom of this spreadsheet stating that "Asset allocation per trustee based on historical source does not reflect IRC 414(I) or ERISA 4044 allocation of assets. In addition, identify which business unit or ledger this asterisk ("*") is intended to identify.
- e. Provide a copy of the "Statement of Financial Position" that the net amount of AGL Business Unit cost is reconciled with according the bottom line for the top and bottom halves of this spreadsheet.

RESPONSE:

1-302. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-12 Pg 6 of 11" tab of this spreadsheet that provides supporting data for the Company's forecasted Pension & OPEB balances at December 31, 2017 and provide the following information.

- a. Provide the source and support for the amounts shown for GL29 of AGL.
- b. Provide the source and support for the amounts allocated to Chattanooga along with the derivation of allocation formulas.
- c. Provide a schedule showing all amounts for all ledgers of all business units.
- d. Provide a copy of the "Statement of Financial Position" that the net amount of AGL Business Unit cost is reconciled with according the bottom line for the top and bottom halves of this spreadsheet.

RESPONSE:

1-303. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-12 Pg 7 of 11" tab of this spreadsheet that provides supporting data for the Company's forecasted Pension & OPEB balances at December 31, 2018 and provide the following information.

- a. Provide the source and support for the amounts shown for GL29 of AGL.
- b. Provide the source and support for the amounts allocated to Chattanooga along with the derivation of allocation formulas.
- c. Provide a schedule showing all amounts for all ledgers of all business units.
- d. Provide a copy of the "Statement of Financial Position" that the net amount of AGL Business Unit cost is reconciled with according to the bottom line for the top and bottom halves of this spreadsheet.

RESPONSE:

1-304. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-12 Pg 8 of 11" tab of this spreadsheet that provides supporting data for the Company's forecasted Pension & OPEB balances at June 30, 2019 and provide the following information.

- a. Provide the source and support for the amounts shown for GL29 of AGL.
- b. Provide the source and support for the amounts allocated to Chattanooga along with the derivation of allocation formulas.
- c. Provide a schedule showing all amounts for all ledgers of all business units.
- d. Provide a copy of the "Statement of Financial Position" that the net amount of AGL Business Unit cost is reconciled with according to the bottom line for the top and bottom halves of this spreadsheet.

RESPONSE:

1-305. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-12 Pg 9 of 11" tab of this spreadsheet that provides supporting data for the Company's forecasted Pension & OPEB balances at December 31, 2017 and provide the following information.

- a. Provide the source and support for the amounts shown for GL29 of AGL.

- b. Provide the source and support for the amounts allocated to Chattanooga along with the derivation of allocation formulas.
- c. Provide a schedule showing all amounts for all ledgers of all business units.

RESPONSE:

1-306. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-12 Pg 10 of 11" tab of this spreadsheet that provides supporting data for the Company's forecasted Pension & OPEB balances at December 31, 2018 and provide the following information.

- a. Provide the source and support for the amounts shown for GL29 of AGL.
- b. Provide the source and support for the amounts allocated to Chattanooga along with the derivation of allocation formulas.
- c. Provide a schedule showing all amounts for all ledgers of all business units.
- d. Provide a copy of the "Statement of Financial Position" that the net amount of AGL Business Unit cost is reconciled with according to the bottom line for the top and bottom halves of this spreadsheet.

RESPONSE:

1-307. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-12 Pg 11 of 11" tab of this spreadsheet that provides supporting data for the Company's forecasted Pension & OPEB balances at June 30, 2019 and provide the following information.

- a. Provide the source and support for the amounts shown for GL29 of AGL.
- b. Provide the source and support for the amounts allocated to Chattanooga along with the derivation of allocation formulas.
- c. Provide a schedule showing all amounts for all ledgers of all business units.

- d. Provide a copy of the “Statement of Financial Position” that the net amount of AGL Business Unit cost is reconciled with according to the bottom line for the top and bottom halves of this spreadsheet.

RESPONSE:

1-308. Refer to the direct testimony of Company witness Johnson that was filed in this case.

Specifically refer to Page 13, Lines 3 – 8 where she makes the following statement:

Is this the [sic] Company proposing a change to how pension expense and the associated rate base is treated in this case?

Yes. The Company is proposing to recover pension expense in accordance with generally accepted accounting principles.

Provide a calculation of the pension and OPEB expense for this case using the cash basis of accounting that Commission has adopted in prior rate cases.

RESPONSE:

1-309. Refer to the spreadsheet included with the Company’s response to MFG 69 regarding account balances. Specifically refer to the “MFG 69-11” tab of this spreadsheet that provides supporting data for the Company’s forecasted Materials, Supplies and Prepayments. Provide supporting details for the content of Materials and Operating Supplies (Account 145300) by month from December 2016 through December 2017.

RESPONSE:

1-310. Refer to the spreadsheet included with the Company’s response to MFG 69 regarding account balances. Specifically refer to the “MFG 69-11” tab of this spreadsheet that provides supporting data for the Company’s forecasted Materials, Supplies and Prepayments. Provide supporting details for the content of Prepayments - Other (Account 157400) by month from December 2016 through December 2017.

RESPONSE:

1-311. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-3" tab of this spreadsheet that provides supporting data for the Company's forecasted Gas Inventory. Provide a reconciliation of the inventory balance (Column E) by month from December 2016 to December 2017 by subaccount to the Company's ledger for Account 145.

RESPONSE:

1-312. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-3" tab of this spreadsheet that provides supporting data for the Company's forecasted Gas Inventory. Provide the monthly inventory volume by inventory subaccount and by month from January 2010 through December 2017.

RESPONSE:

1-313. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-3" tab of this spreadsheet that provides supporting data for the Company's forecasted Gas Inventory. Provide the support for the weighted average cost of gas in inventory by inventory subaccount and by month from January 2010 through December 2017.

RESPONSE:

1-314. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-3" tab of this spreadsheet that provides supporting data for the Company's forecasted Gas Inventory. Provide the monthly inventory ending balance by inventory subaccount and by month from January 2010 through December 2017.

RESPONSE:

1-315. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-3" tab of this spreadsheet that provides supporting data for the Company's forecasted Gas Inventory. Provide the source and support for the Company's inventory projection (volume, price and ending balance) by month from January 2018 through June 2019, which appear here as hard coded amounts.

RESPONSE:

1-316. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-4" tab of this spreadsheet that provides supporting data for the Company's forecasted Deferred Rate Case Expense. In addition, refer to the Company's response to MFG -58 regarding rate case costs. Provide a copy of all executed contracts for all outside consultants that the Company intends to use in this rate case and reconcile these contracts against the individual component for each estimated cost of this rate case shown on MFG 69-4.

RESPONSE:

1-317. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-5 Pg 1 of 2" tab of this spreadsheet that provides supporting data for the Company's forecasted Reserve for Uncollectible Accounts. Provide the source and support for the accruals, net write-offs and ending balance to Account 139100 from January 2010 through December 2017.

RESPONSE:

1-318. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-5 Pg 1 of 2" tab of this spreadsheet that provides supporting data for the Company's forecasted Reserve for Uncollectible Accounts. Provide the

source and support for the “Revenues Less Damage Billing” (Column L) by month from January 2016 through December 2017 that are presented here as hard-coded amounts.

RESPONSE:

1-319. Refer to the spreadsheet included with the Company’s response to MFG 69 regarding account balances. Specifically refer to the “MFG 69-5 Pg 1 of 2” tab of this spreadsheet that provides supporting data for the Company’s forecasted Reserve for Uncollectible Accounts. Provide the source and support for the “Margin Less Damage Billing” (Column N) by month from January 2016 through December 2017 that are presented here as hard-coded amounts.

RESPONSE:

1-320. Refer to the spreadsheet included with the Company’s response to MFG 69 regarding account balances. Specifically refer to the “MFG 69-5 Pg 1 of 2” tab of this spreadsheet that provides supporting data for the Company’s forecasted Reserve for Uncollectible Accounts. Provide the source and support for the “Attrition Period Margin Less Damage Billings” (Cell L50) of \$32,444,989 that is presented here as a hard-coded amount.

RESPONSE:

1-321. Refer to the spreadsheet included with the Company’s response to MFG 69 regarding account balances. Specifically refer to the “MFG 69-5 Pg 1 of 2” tab of this spreadsheet that provides supporting data for the Company’s forecasted Reserve for Uncollectible Accounts. Provide the source and support for the “Attrition Period Damage Billing” (Cell L51) of \$78,600 that is presented here as a hard-coded amount.

RESPONSE:

1-322. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-5 Pg 1 of 2" tab of this spreadsheet that provides supporting data for the Company's forecasted Reserve for Uncollectible Accounts. Explain the Company's rationale for appearing to deduct damage billing twice (in Cells L50 and L51).

RESPONSE:

1-323. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-5 Pg 1 of 2" tab of this spreadsheet that provides supporting data for the Company's forecasted Reserve for Uncollectible Accounts. Provide the source and support for the "Estimated Damage Billing Uncollectible" (Cell L55) of \$19,900 that is presented here as a hard-coded amount.

RESPONSE:

1-324. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-5 Pg 2 of 2" tab of this spreadsheet that provides supporting data in part for the Company's forecasted Unclaimed Customer Credits. Provide the monthly balance of this Account 225151 by month from January 2010 through December 2017.

RESPONSE:

1-325. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-5 Pg 2 of 2" tab of this spreadsheet that provides supporting data in part for the Company's forecasted Health Insurance Reserve. Provide the balance of this Account 278500 by month from January 2010 through December 2017.

RESPONSE:

1-326. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-6" tab of this spreadsheet that provides supporting data in part for the Company's forecasted Customer Deposits. Provide the balance of this Account 235201 by month from January 2010 through December 2017.

RESPONSE:

1-327. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-7" tab of this spreadsheet that provides supporting data in part for the Company's forecasted Interest on Customer Deposits. Provide the balance of this Account 241990 by month from January 2010 through December 2017.

RESPONSE:

1-328. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-7" tab of this spreadsheet that provides supporting data in part for the Company's forecasted Interest on Customer Deposits. Provide the details and support for the Company's footnote statement that "In October 2017, the Company adjusted accrued interest on customer deposits to the appropriate level."

RESPONSE:

1-329. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-10" tab of this spreadsheet that provides supporting data in part for the Company's forecasted Interest on Customer Advances. Provide the balance of this Account 255801 by month from January 2010 through December 2017. In addition, provide supporting details of the journal entry in July 2017 to reset this account to a zero balance.

RESPONSE:

1-330. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-14" tab of this spreadsheet that provides supporting data in part for the Company's calculation of the Forfeited Discount Rate. Provide the source and support for the Billing amounts (Column C) that are presented here as hard-coded numbers from January 2010 through December 2017.

RESPONSE:

1-331. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-14" tab of this spreadsheet that provides supporting data in part for the Company's calculation of the Forfeited Discount Rate. Reconcile the amounts presented on this schedule as Forfeited Discounts in Account 407050 (Column E) with the amounts shown for this account in the Trial Balance in MFG 23-1.

RESPONSE:

1-332. Refer to the spreadsheet included with the Company's response to MFG 69 regarding account balances. Specifically refer to the "MFG 69-14" tab of this spreadsheet that provides supporting data in part for the Company's calculation of the Forfeited Discount Rate. Provide the source and support for the Forfeited Discounts (Column E) that are presented here as hard-coded numbers from January 2010 through December 2017.

RESPONSE:

1-333. Refer to the spreadsheet included with the Company's response to MFG 23-1 regarding the trial balance for Chattanooga Gas Company. Provide an explanation of the content for "Account 132950 – Misc Adjustments-Gas" which has a balance of \$-209,325 at December 31, 2017 and why this account is not included in rate base.

RESPONSE:

1-334. Refer to the spreadsheet included with the Company's response to MFG 23-1 regarding the trial balance for Chattanooga Gas Company. Provide an explanation of the content for "Account 135465 – Intercompany Plant Transit" which has a balance of \$-1,838,986 at December 31, 2017 and why this account is not included in rate base.

RESPONSE:

1-335. Refer to the spreadsheet included with the Company's response to MFG 23-1 regarding the trial balance for Chattanooga Gas Company. Provide an explanation of the content for "Account 277060 – Pension Current Liability-Excess" which has a balance of \$-15,445 at December 31, 2017 and why this account is not included in rate base.

RESPONSE:

1-336. Refer to the spreadsheet included with the Company's response to MFG 71-1 regarding the allocated investment cost to Chattanooga Gas Company and provide the following information:

- a. The source and support by subaccount for the \$92,972,981 in General Plant at December 31, 2017 (Column C) that is presented here as hard-coded numbers.
- b. The source and support by subaccount for the projected additions in General Plant from January 2018 through June 2019 (Columns AB to AS) that are presented here as hard-coded numbers.
- c. The source and support by subaccount for the projected retirements in General Plant from January 2018 through June 2019 (Columns AV to BM) that are presented here as hard-coded numbers.
- d. The source and support for the "FYE 12/2017 Allocable Cost from AGSC" of \$274,687,176 (Cell B58) that is presented here as a hard-coded number.
- e. The source and support for the "FYE 12/2017 Costs Allocated to CGC" of \$5,229,945 (Cell B59) that is presented here as a hard-coded number.

RESPONSE:

1-337. Refer to the spreadsheet included with the Company's response to MFG 71-2 regarding the allocated depreciation reserve cost to Chattanooga Gas Company and provide the following information:

- a. The source and support for the current depreciation rates (Column B) that are presented here as hard-coded numbers.
- b. The source and support by subaccount for the \$31,619,026 in Accumulated Depreciation at December 31, 2017 (Column C) that is presented here as hard-coded numbers.
- c. The source and support by subaccount for the projected provision to accumulated depreciation from January 2018 through June 2019 (Columns AA to AR) that are presented here as hard-coded numbers.
- d. The source and support by subaccount for the projected retirements in accumulated depreciation from January 2018 through June 2019 (Columns AU to BL) that are presented here as hard-coded numbers.

RESPONSE:

1-338. Has the Company installed Automated Meter Infrastructure (AMI) and, if so, provide the date AMI assets were installed and provide a copy of all supporting documentation provided to management that was relied upon in approving the project.

RESPONSE:

LEAD LAG REQUESTS

1-339. Referring to page 18 of the ICC Order provided in MFG 19-3, there is a reference to an intercompany billing lead of 45.09 days. The intercompany billing lead contained within the "Intercompany Billings" tab within MFG 72-1 indicates an intercompany billing lead of 21.94 days. Provide a comprehensive narrative discussion and a reconciliation supporting the two very differing intercompany billing leads.

RESPONSE:

NON-LABOR O&M REQUESTS

1-340. Referring to intercompany billings, identify the costs associated with the recovery of federal income tax expense charged by affiliates to the Company for the use of affiliate assets or the provision of affiliate services for calendar year 2017. For each income tax expense component incurred by the Company related to an affiliated transaction provide the following:

- a. A complete description of the service or asset used by the Company.
- b. The month in which the costs were incurred.
- c. The total affiliate costs which were recorded on the books of the Company for the asset or service and the portion attributable to the recovery of affiliate federal income tax expense.

RESPONSE:

1-341. The Company's Response to CPAD 1-151 indicates that no legal costs associated with lawsuits have been charged to the Company either directly or indirectly in 2017. The Southern Company's 10K contains the following statement "Southern Company and its subsidiaries are subject to certain claims and legal actions arising in the ordinary course of business." Confirm that it is the position of the Company that none of the third party costs (including outside counsel, consultant and other experts) incurred in defending these claims have been allocated to the Company in 2017? If this is not confirmed, provide the following information for such costs allocated to the Company:

- a. Identification and summary of all existing litigation whose costs are subject to allocation to the Company.
- b. Total third-party costs incurred by Southern Company for outside counsel, expert witnesses and other consultants incurred in 2017, identified by the claim/litigation.

- c. For each legal claim identified above, identify how such costs were allocated to the Company along with the actual costs charged to the Company in 2017.

RESPONSE:

1-342. Regarding MFG Item 68-4, provide the actual costs within this format for the period January 2016 through February, 2018.

RESPONSE:

1-343. Provide a listing of all assumptions relied upon in preparation of the 2018 CGC O&M budget along with all supporting documentation relied upon in the development of the budget.

RESPONSE:

1-344. Provide a listing of all assumptions relied upon in preparation of the 2018 AGSC budget along with all supporting documentation relied upon in the development of the budget. Such response should include the forecast of the underlying allocation ratios utilized in the budget.

RESPONSE:

O&M LABOR REQUESTS

1-345. Provide the Tennessee based employee labor costs charged to O&M expense by month for the period January 2015 through February, 2018.

RESPONSE:

1-346. Provide the Tennessee based employee headcount by month for the period January 2015 through February 2018.

RESPONSE:

AFFILIATE TRANSACTIONS REQUESTS

1-347. Pages 4-6 of Attachment to the Company's response to CPAD 1-13(c) reference three general methods for the assignment of costs from AGL Services Company to CCG; specifically (i) Direct Charge, (ii) Direct Assigned and (iii) Distributed and Allocated. With respect to this response, provide the following:

- a. The charges incurred by CCG for each of the three categories, by month for the period January 2016 – the most current information available.
- b. Within the category of Direct Charge, provide a breakdown of the 2016 and 2017 annual charges by categories contained on pages 5 and 6, and any other methodology that may not be listed within the Direct Charge category.
- c. Provide a breakdown of the monthly charges allocated to CCG for the period January, 2016 through the most current information available within the Distribution and Allocation Methods category, further identified by the allocation methodologies contained on pages 6 and 7 of the response to CPAD 1-13c and any other methodology that may not be listed within the Direct Charge category.
- d. Provide all underlying documentation supporting the development of the Composite Ratio, which would include all underlying workpapers for each of the four ratios comprising the Composite ratio for all periods of 2016, 2017 and 2018, for all affiliates. The underlying ratios and data should clearly indicate the effective date for each of the calculations.

RESPONSE:

1-348. Page 1 of Attachment to the Company's response to CPAD 1-13, Section II part B, references the Annual Selection of Services and requires annual communication between AGL Services Company (AGSC) and CGC by October 1st and November 30th of each year. Provide copies of such communication for 2016 and 2017.

RESPONSE:

1-349. The Company's response to CPAD 1-148a (mistitled CPAD 1-144a) implies that costs contained within this schedule are those incurred by Southern Company Gas and allocated to

affiliates. Response to CPAD 1-149 indicates Southern Company Gas does not allocate common costs to subsidiaries. Confirm that these costs are those allocated from AGSC and not Southern Company Gas.

RESPONSE:

1-350. Refer to the attachments provided within the Company's response to CPAD 1-14. Either confirm that these agreements represent all affiliate agreements in place that govern the costs of services provided by affiliates to the Company, or provide copies of all such agreements.

RESPONSE:

1-351. The Attachment to the Company's response to CPAD 1-13b (2B) refers to an SCS Cost Allocation Manual, incorporated herein by reference. Provide a copy of the referenced SCS Cost Allocation Manual.

RESPONSE:

1-352. Regarding the Attachment to the Company's response to CPAD 1-13b, provide the following information:

- a. Monthly "Direct" charges from SCS to AGSC by type of service listed on pages 2 and 3 for the period January, 2015 through December, 2017.
- b. Monthly "Prorated Charges" from SCS to AGSC by type of service listed on pages 2 and 3 for the period January, 2015 through December, 2017.
- c. A comprehensive discussion of how such SCS originated costs are allocated/assigned by AGSC to its clients, including the Company.

RESPONSE:

1-353. The Attachment to the Company's response to CPAD 1-13c, Exhibit I refers to "Account Codes" which include Cost Center, Account Number, Capital Project or O&M Project. Provide a listing and definition of all such terms applicable as of January 1, 2018.

RESPONSE:

1-354. Provide a copy of the AGSC 2017 General Ledger in Excel format.

RESPONSE:

1-355. The Attachment to the Company's response to CPAD 1-13c indicates "AGSC uses standard rates and drivers to direct charge costs to AGLR System companies by utilizing the unique business identifier." Identify and discuss each 'standard rate and drivers' used by AGSC to allocate costs and provide the associated costs in 2016 and 2017 that were assigned using such 'rates and drivers'. Provide the underlying support for each such accounting convention used to direct charge costs.

RESPONSE:

1-356. Refer to the Company's response to CPAD 1-148a. Provide a copy of the 2016 and 2017 Trial Balance and the 2017 Income Statement (or similar document identifying annual revenues and expenses) for the following entities:

- a. Nicor Gas Exploration
- b. Gas Utility Finance Corp
- c. AGL Rome Holding Inc
- d. Appliance Bus FL Service
- e. Pivotal Jefferson Island Storage and Hub
- f. Georgia Gas Company
- g. Georgia Natural Gas Company

RESPONSE:

RESPECTFULLY SUBMITTED,



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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served via U.S. Mail or electronic mail upon:

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This the 13th day of April, 2018.



Wayne M. Irvin