

intact, source data used, and explain all assumptions and calculations used.

RESPONSE: See file: DED Response to CGC No 1, Exhibit DED-10.xlsx.

DISCOVERY REQUEST NO. 2:

Provide all studies, analysis, and supporting documentation used to develop the AG participation numbers for programmable thermostats, Low Income weatherization, High Efficiency Furnace/Boiler Incentive, Tankless Water Heater Incentive, and High Efficiency Storage Water Heater Incentive shown in Exhibit DED-8 of CAPD witness Dismukes direct testimony.

RESPONSE: See file: DED Response to CGC No 2, Exhibit DED-8, 1.xlsx; and DED Response to CGC No 2, Exhibit DED-8, 2.xlsx

DISCOVERY REQUEST NO. 3:

Provide all studies, analysis, and supporting documentation used to develop the AG energy savings numbers for programmable thermostats, Low Income weatherization, High Efficiency Furnace/Boiler Incentive, Tankless Water Heater Incentive, and High Efficiency Storage Water Heater Incentive shown in Exhibit DED-8 of CAPD witness Dismukes direct testimony.

RESPONSE: See response to Discovery Request No. 2.

DISCOVERY REQUEST NO. 4:

Provide all studies, analysis, and supporting documentation used to develop the AG net to gross ratios for Residential Programmable Thermostats, Residential High Efficiency Furnace/Boiler Incentive, Residential Tankless Water Heater Incentive, Residential High Efficiency Storage Water Heater Incentive, Food Service Incentive, Commercial High Efficiency Furnace/Boiler

Incentive, Commercial Tankless Water Heater Incentive, Commercial High Efficiency Storage Water Heater shown in Exhibit DED-8 of CAPD witness Dismukes direct testimony.

RESPONSE: See response to Discovery Request No. 2.

DISCOVERY REQUEST NO. 5:

For purposes of this request, please refer to page 31 of and Appendix A to Mr. Buckner's testimony. Provide a copy of all analysis that identify the impact of the "Budget Re-Repayment Plans" on uncollectible expense and uncollected gas cost. Provide all workpapers and source documents used in connection with this response. Provide the requested workpapers in electronic spreadsheet form, with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, please provide the information in the form that most closely matches what has been requested.

RESPONSE: No analyses, workpapers, source documents, calculations, or assumptions were made or performed for the impact of the "Budget Re-Payment Plans."

DISCOVERY REQUEST NO. 6:

For purposes of this request, please refer to page 31 of and Appendix A to Mr. Buckner's testimony. Provide a copy of all analysis that identify the impact that the "Ability to Waive Fees" provision of the proposed "consumer protection recommendations" would have on revenues, and identify the amount and where the Consumer Advocate and Protection Division has included an adjustment to the attrition period revenues for this proposed provision. Provide all workpapers and source documents used in connection with this response. Provide the

requested workpapers in electronic spreadsheet form, with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, please provide the information in the form that most closely matches what has been requested.

RESPONSE: No analyses, workpapers, source documents, calculations, or assumptions were made or performed for the impact of the “Ability to Waive Fees.”

DISCOVERY REQUEST NO. 7:

For purposes of this request, please refer to page 31 of and Appendix A to Mr. Buckner’s testimony. Provide a copy of all analysis that identify the capital investment and operating expense that would be incurred in the implementation of the proposed “consumer protection recommendations.” Provide all workpapers and source documents used in connection with this response. Provide the requested workpapers in electronic spreadsheet form, with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, please provide the information in the form that most closely matches what has been requested. Identify the specific adjustments that the Consumer Advocate and Protection Division has included for any additional capital investment or expense in the attrition period.

RESPONSE: No analyses, workpapers, source documents, calculations, or assumptions were made or performed to identify the capital investment and operating expense that would be incurred in the implementation of the proposed “consumer protection recommendations.”

DISCOVERY REQUEST NO. 8:

For purposes of this request, please refer to page 31 of and Appendix A to Mr. Buckner's testimony. Provide a copy of all analysis that identify the number of Chattanooga Gas Customers that would be subject to the "Budget Re-Payment Plans." Provide all workpapers and source documents used in connection with this response. Provide the requested workpapers in electronic spreadsheet form, with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, please provide the information in the form that most closely matches what has been requested. Identify where the Consumer Advocate and Protection Division has included adjustments for any additional capital investment or expense in the attrition period.

RESPONSE: No analyses, workpapers, source documents, calculations, or assumptions were made or performed to identify the number of Chattanooga Gas Customers that would be subject to the "Budget Re-Payment Plans." However in TRA Docket No. 06-00175, CGC witness Steve Lindsey stated,

As a result, CGC, and the two other major local gas distribution companies in Tennessee, developed a plan to automatically place customers who were in good standing as of November 1, 2005 on a budget billing plan, instead of discontinuing service when a customer was unable to pay on a timely basis. At this point it appears that the plan was successful. The number of accounts shut off for failure to pay during the 2005-2006 heating season declined by 30%, while the number of customers on budget billing increased by approximately 25%.

<http://www.state.tn.us/tra/orders/2006/0600175f.pdf> Page 9, Lines 4-10, Direct Testimony.

DISCOVERY REQUEST NO. 9:

The following statement is included in the proposed "Budget Re-Payment Plans" on Appendix A of Mr. Buckner's testimony:

Provided however, if a customer or household member of the customer is able to demonstrate a **unique financial distress situation** or the customer is disabled or a member of the customer's household is disabled, the Company shall be required to again consider permitting the customer to have additional installment plan(s) during the same calendar year.

- a. Provide the detailed definition of a "unique financial distress situation;"
- b. Identify and explain the action and/or documentation that would be required of a customer to demonstrate a unique financial situation;
- c. Identify and explain the specific criteria for a customer or a member of the customer's household to be considered as disabled; and
- d. Identify and explain the required action by the Company to verify a "unique financial distress situation" or that the customer or a member of the household is disabled.

RESPONSE:

- a. The Consumer Advocate is unable to provide a detailed description of a "unique financial distress situation." Each individual Chattanooga Gas customer would need to be able to demonstrate to the Company their need to have installment plan(s).
- b. The Consumer Advocate is unable to identify and explain the action and/or documentation provide a detailed description of a "unique financial distress situation." Each individual Chattanooga Gas customer would need to be able to demonstrate to the Company their need to have installment plan(s).

- c. The Consumer Advocate is unable to identify and explain the specific criteria for a customer or a member of the customer's household to be considered as disabled.

However, "The World Health Organization defines Disability as follows:

Disabilities is an umbrella term, covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Thus disability is a complex phenomenon, reflecting an interaction between features of a person's body and features of the society in which he or she lives.

<http://en.wikipedia.org/wiki/Disability>

- d. The Consumer Advocate is unable to identify and explain the required action by the Company criteria for a customer or a member of the customer's household to be considered as disabled. However, an example of an appropriate action is demonstrated in the following tariff of CenturyLink in Tennessee:

B. Charges for Directory Assistance are not applicable to:

1) Calls made by customers who are unable to use a telephone directory because of a visual or physical disability which can be confirmed by a physician, appropriate group or agency from their residence or business line.

http://about.centurylink.com/tariffs/pdf_files/file_2110.pdf

DISCOVERY REQUEST NO. 10:

The following statement is included in the proposed "Budget Re-Payment Plan" on Appendix A of Mr. Buckner's testimony:

Provided however, if a customer or **household member** of the customer is able to demonstrate a unique financial distress

situation or the customer is disabled or a member of the customer's household is disabled, the Company shall be required to again consider permitting the customer to have additional installment plan(s) during the same calendar year.

- a. Provide the rational for requiring the utility to offer a "Budget Re-Payment Plan" when it is a "household member" that can demonstrate "a unique financial distress situation" and not the customer that can demonstrate "a unique financial distress situation."
- b. Provide the detailed definition of a "household member" as used in this proposed requirement; and
- c. Identify and explain the documentation required for a person to qualify as a "household member" as used in the proposed provision.

RESPONSE:

- a. The Consumer Advocate's rationale is that, "if a **customer or household member of the customer** [Emphasis added] is able to demonstrate a "unique financial distress situation," then the Company would offer a "Budget Re-Payment Plan."
- b. The Consumer Advocate would define a "household member" as one who dwells under the same roof with other members of the social unit.
- c. The Consumer Advocate is unable to fully identify and explain the required action by the Company to document that a person qualifies as a "household member" as used in the proposed provision. Any commonly accepted proof of residence would suffice.

DISCOVERY REQUEST NO. 11:

Explain if the Consumer Advocate proposes that the TRA consider the proposed "consumer protection recommendations" included in Appendix A to Mr. Buckner's testimony for all of the local natural gas distribution companies regulated by the Authority, or does the Consumer

Advocate propose that these proposed “consumer protection recommendations” be considered for Chattanooga Gas Company only. If the Consumer Advocate is proposing the “consumer protection recommendations” for Chattanooga Gas Company only, explain why the Consumer Advocate proposes that these be adopted only for Chattanooga Gas Company.

RESPONSE: The Consumer Advocate is proposing the “consumer protection recommendations” for Chattanooga Gas in this docket. The Consumer Advocate would recommend the same “consumer protections” for all local natural gas distribution gas companies regulated by the TRA. Atmos Energy currently has a Budget Plan program in its tariff, which is designed to allow a customer to equalize payment for gas service over a one year period. (Atmos Energy Corporation T.R.A. No. 1, 3rd Revised Sheet No. 58.)

DISCOVERY REQUEST NO. 12:

Please provide all analysis, data, workpapers, and research materials that validate your “concern” stated on page 30 of Mr. Buckner’s Direct Testimony, that “Sequent may sell a portion of CGC’s system capacity to SouthStar Energy Services, LLC (“SouthStar”), its affiliate, at a below market value price.”

RESPONSE: The following supports or gives cause for the Consumer Advocate’s concern: (1) Sequent’s settlement agreement with the Federal Energy Regulatory Commission’s (“FERC”) Office of Enforcement concerning certain non-compliant activities regarding FERC’s capacity release rules and resulting \$5 million fine and \$53,728 in Disgorgement. (**CONFIDENTIAL TRA Docket #07-00224, letter dated June 26, 2009**); the Consumer Advocate is not claiming that this FERC action involved CGC assets but the fact that there was such a large fine involving capacity releases causes “concern” about the need to understand fully all affiliate transactions

involving capacity and other assets; (2) Exeter report section 3.3.3 TRA Docket #05-00165) noting the need to examine transactions between Piedmont and its affiliate SouthStar; (3) the Company's responses to the Consumer Advocate's Discovery Requests #201 and #202 regarding requests for information about SouthStar which provided no information regarding such sales; and (4) the State of North Carolina Utilities Commission Order Docket No. G-100 dated December 22, 1995 which sets forth a plan whereby profits from certain affiliate transactions are used to relieve the cost of gas for customers (See Attachments).

DISCOVERY REQUEST NO. 13:

Please provide all explanations, analysis, data, workpapers, and studies that support the contention on page 30 of Mr. Buckner's testimony that the TRA's Staff's audits of CGC's gas cost and the existing Asset Management Agreement between CGC and Sequent may not totally capture secondary transactions with SouthStar.

RESPONSE: The Consumer Advocate is not aware that the TRA Staff audits SouthStar or Sequent.

DISCOVERY REQUEST NO. 14:

Provide all explanations, analysis, data, workpapers, studies, and research materials that support the CAPD's belief that "all revenues from secondary transactions of system capacity to an affiliated company should inure to the ratepayers of CGC." See Buckner Testimony, page 30.

RESPONSE: The Consumer Advocate's duty is to pursue just and reasonable rates for the ratepayer. If all revenues from secondary transactions of CGC's system capacity are not

recognized, then the ratepayers have been over charged for the cost of gas, i.e., unjust and unreasonable rates.

DISCOVERY REQUEST NO. 15:

Provide all analysis, data, workpapers, and research materials that support your implication on page 30 of Mr. Buckner's testimony that SouthStar should remit profits from transactions using CGC assets, which were bought in an arms-length transaction in a competitive market.

RESPONSE: The Consumer Advocate reaffirms that SouthStar should remit profits from transactions using CGC assets. It remains unknown that an arms-length transaction in a competitive market has occurred with the sales CGC's assets by Sequent to SouthStar. The most fundamental and basic accounting rules clearly favor the disclosure of affiliate transactions. Under Generally Accepted Accounting Principles ("GAAP"), as promulgated by the Financial Accounting Standards Board:

Transactions involving related parties cannot be presumed to be carried out on an arm's length basis, as the requisite conditions of competitive, free-market dealings may not exist. Representations about transactions with related parties, if made, shall not imply that the related party transactions were consummated on terms equivalent to those that prevail in arm's-length transactions unless such representations can be substantiated...

Statement of Financial Accounting Standards No. 57: Related Party Disclosures, p.5, ¶3 (March 1982) (emphasis added). Furthermore, the Financial Accounting Standards Board ("FASB") explained **"for accounting information to be useful, it should be relevant (meaning that it has predictive or feedback value) and reliable (meaning that it has representational faithfulness, verifiability, and neutrality)."** *Id.* at 7, ¶12, citing *FASB Concepts Statement No.*

2, *Qualitative Characteristics of Accounting Information* (emphasis added). FASB goes on to explain that related party transactions specifically do not satisfy the requirements that data be “relevant” and “reliable.” *Id.* at 7-8. With regard to the relevancy of related party data, FASB explains that:

Accounting information is relevant if it is ‘capable of making a difference in a decision by helping users to form predictions about the outcomes of past, present, and future events or to confirm or correct expectations.’ **Relationships between parties may enable one of the parties to exercise a degree of influence over the other such that the influenced party may be favored or caused to subordinate its independent interests....**for example, the terms under which a subsidiary leases equipment to another subsidiary of a common parent may be imposed by the common parent and might vary significantly from one lease to another because of circumstances entirely unrelated to market prices for similar leases...

Id. at 7, ¶13 (emphasis added). FASB also explains that the reliability of data in related party transactions is similarly compromised:

Reliability of financial information involves ‘assurance that accounting measures represent what they purport to represent.’ Without disclosure to the contrary, there is a general presumption that transactions reflected in financial statements have been consummated on an arm’s length basis between independent parties. However that presumption is not justified when related party transactions exist because the requisite conditions of competitive, free-market dealings may not exist. **Because it is possible for related party transactions to be arranged to obtain certain results desired by the related parties, the resulting accounting measures may not represent what they usually would be expected to represent.**

Id. at 8, ¶15 (emphasis added). For all of the reasons espoused by the FASB, related party transactions in financial statements are required to be either eliminated or accompanied by certain disclosures, including the nature of relationships involved, a description of the

transactions, the dollar amounts of transactions, and amounts due from or to related parties. *Id.* at 5, ¶2.

Further, in North Carolina net compensation from secondary market transactions is recorded in the LDC's PGA deferred account as a reduction of demand and storage charges. (State of North Carolina Utilities Commission Order Docket No. G-100 dated December 22, 1995, See Attachments).

Finally, the Supreme Court of Tennessee in *Tennessee Public Service Commission et. al, v. Nashville Gas Company* 551S.W.2d 315, 319-320 (Tenn.1977) held the following:

we are....equally convinced that a regulatory body, such as the Public Service Commission, is not bound in all instances to observe corporate charters and the form of corporate structure or stock ownership in regulating a public utility, and in fixing fair and reasonable rates for its operations. The filing of consolidated reports by parent and subsidiary corporations, both for tax purposes and regulatory purposes, is so commonplace as to be completely familiar in modern law and practice. Considerations of "piercing the veil", which are involved in cases involving tort, misconduct or fraud, are largely irrelevant in the regulatory and revenue fields. In order for taxing authorities to obtain accurate information as to revenues and expenses, the filing of consolidated tax returns by affiliated corporations is frequently required, and rate-making and regulatory bodies frequently can and do consider entire operating systems of utility companies in determining, from the standpoint both of the regulated carrier and the consuming public fair and reasonable rates of return.

DISCOVERY REQUEST NO. 16:

Admit or deny: That credits to the ratepayers for off-system sales and/or asset management payments would be credited to customers through the purchased gas adjustment mechanism.

RESPONSE: Admit to the extent the question is referring to Sequent's sales.

DISCOVERY REQUEST NO. 17:

Provide all analysis, data, workpapers, and studies that show that CGC and Sequent do not account for all transactions with affiliates in its reports to the TRA.

RESPONSE: The Consumer Advocate is not aware of any information supplied to the TRA regarding CGC transactions with affiliates. In addition, CGC has not yet supplied any such information as requested by the Consumer Advocate in its Discovery Requests in this docket.

DISCOVERY REQUEST NO. 18:

Admit or deny: The current asset management agreement between CGC and Sequent allows for on-site audit of transactions which would allow the TRA Staff to determine if any capacity releases or bundled sales were being conducted below market prices.

RESPONSE: Deny. The Consumer Advocate is not aware that the asset management agreement specifically allows an audit of SouthStar transactions from CGC's capacity release. The Consumer Advocate would note, however, that the fact that SouthStar was jointly owned by Piedmont Natural Gas and AGL Resources, Inc. could aid in any audit, since both owners would have an interest in correct accounting.

DISCOVERY REQUEST NO. 19:

Admit or deny: That under the terms of the current asset management agreement between CGC and Sequent, that Sequent would bear 100% of any lost value associated with any sale or release below market prices until the total shareable value exceeds the minimum annual guarantee.

RESPONSE: Admit.

DISCOVERY REQUEST NO. 20:

Admit or deny: Under the Federal Energy Regulatory Commission's rules any capacity release proposed at below the maximum tariff rate must be posted on the pipeline's electronic bulletin board to allow parties willing to pay more than the posted price to bid for the capacity.

RESPONSE: Deny. The Consumer Advocate is unable to admit that intrastate transactions are subject to FERC rules; furthermore, this question does not distinguish between interstate and intrastate sales. In addition, the issue in this case is not the maximum tariff rate, but the profits from affiliate transactions.

DISCOVERY REQUEST NO. 21:

Please identify and describe each of the goals and objectives that CAPD recommends be applied to design CGC rates in this proceeding.

RESPONSE: The goals and objectives of the Consumer Advocate in designing rates for CGC in this proceeding are consistent with the language found in the NARUC Gas Distribution Rate Design Manual:

Gas rate design is not an abstract application of economic principles, but rather a practical exercise which affects customers in their daily lives. The rate designer should be aware that people need affordable gas to heat their homes and businesses need energy supplies which enable them to remain competitive. The rate designer should be sympathetic to these concerns while continuing to follow the basic rate design principles....Utility ratemaking has never been an exact science. The rate structure for a utility should normally be designed to recover the total allowed revenue requirement of the utility, including a fair rate of return. While cost is an important factor in ratemaking, actual rates are often designed to incorporate numerous other factors, including technological, economic, regulatory, political, promotional, and social. Pages 9 and 57.

Additionally, the Consumer Advocate believes T.C.A. §65-4-126 is applicable,

The general assembly declares that the policy of this state is that the Tennessee regulatory authority will seek to implement, in appropriate proceedings for each electric and gas utility, with respect to which the authority has rate making authority, a general policy that ensures that utility financial incentives are aligned with helping their customers use energy more efficiently and that provides timely cost recovery and **a timely earnings opportunity for utilities associated with cost-effective measurable and verifiable efficiency savings, in a way that sustains or enhances utility customers' incentives to use energy more efficiently** [Emphasis added].

To that end, the Consumer Advocate proffers the Direct Testimony of Dr. David Dismukes in this docket.

DISCOVERY REQUEST NO. 22:

Please state Mr. Buckner's opinion regarding the potential role that CGC has or may have in promoting energy efficiency and conservation by customers. Please explain the basis for Mr. Buckner's opinion including any relevant research, publications or other documents.

RESPONSE: See Consumer Advocate's response to CGC's Discovery Request #21.

DISCOVERY REQUEST NO. 23:

Please provide a full definition of the term "abundant equity" as used by Mr. Buckner on page 25, line 1 of his prepared direct testimony.

RESPONSE: The Consumer Advocate's use of the term "abundant equity" means that there is ample fairness in the fixed rates for the largest LDCs across the three grand divisions of the state

of Tennessee. Further, the fixed rates of the largest LDCs charged to Tennessee ratepayers are very comparable.

DISCOVERY REQUEST NO. 24

Please provide all support for Mr. Buckner's position that the monthly fixed charges for Piedmont Gas Company and Atmos Energy are determinative of the appropriate monthly fixed charge for CGC customers. Include citations to all applicable TRA regulations and/or precedent.

RESPONSE: The Consumer Advocate cites the Direct Testimony of CGC witness, Philip G. Buchanan, in TRA Docket No. 04-00034:

Q. Are the proposed customer charges in line with fixed charges of other gas utilities in Tennessee?

A. Yes. The proposed customer charges are **comparable** [Emphasis Added] to those of Nashville Gas Company. Residential customer charges recently approved in Docket #03-00313 for Nashville Gas Company are \$13 during winter months and \$10 during summer months. General Service customer charges approved for Nashville Gas \$29, \$75, and \$300 for small, medium, and large commercial customers respectively, with no reduction in the summer months.

<http://www.state.tn.us/tra/orders/2004/0400034a.pdf> Page 7, Lines 15-22.

DISCOVERY REQUEST NO. 25:

Does Mr. Buckner believe that the variable distribution charges of Piedmont Gas Company and/or Atmos Energy as approved by the TRA are relevant to the distribution charges that should be approved for CGC in this proceeding? If so, please fully explain the relationship that exists.

RESPONSE: The Consumer Advocate cites the Direct Testimony of CGC witness, Steve Lindsey in TRA Docket No. 04-00034 that the variable distribution charges of Nashville Gas

Company were relevant. <http://www.state.tn.us/tra/orders/2004/0400034.pdf> Page 17, Lines 3-6 and Page 19, Lines 14-16.

DISCOVERY REQUEST NO. 26:

Please identify and explain each “burden” and “benefit” that Mr. Buckner is referring to on page 25, lines 8-10 of his direct testimony.

RESPONSE: The use of the words “burden” and “benefit” on lines 8-10, page 25 of Mr. Buckner’s direct testimony are in reference to any change in revenue requirement being borne uniformly to all customer classes. If the TRA elects to increase the revenue requirement of CGC, then the “burden” of paying for the increase is borne uniformly by all customer classes. If the TRA elects to decrease the revenue requirement of CGC, then the “benefit” of paying less is uniformly received by all customer classes. Additionally, more of the “burden” within a customer class is borne by the ratepayer who uses more natural gas. Conversely, more of the “benefit” within a customer class is borne by the ratepayer who conserves more natural gas.

DISCOVERY REQUEST NO. 27:

Please provide all support for Mr. Buckner’s position that “burdens” and “benefits” should be “shared proportionately by all customers” on CGC’s system.

RESPONSE: See Consumer Advocate’s response to CGC’s Discovery Request #21.

DISCOVERY REQUEST NO. 28:

Please provide all support including applicable empirical studies supporting Mr. Buckner's statement that "higher monthly customer charges will likely negatively impact the conservation efforts of customers."

RESPONSE: Intuitively, fixed monthly customer charges are a higher percentage of the customer's bills for low volume users. Using CGC's proposed margin rates for example, a residential customer using only 1 therm in a winter month will pay \$16.26 in margin (\$16 fixed monthly margin plus \$.26071 per therm margin). As a result, 1 therm costs \$16.26 in margin. Conversely, a residential customer using 10 therms in a winter month will pay \$18.61 in margin (\$16 fixed monthly margin plus \$2.6071 per ten therms margin). As a result, 1 therm costs \$1.86 in margin. Thus, the high monthly fixed charge discourages conservation. This rate design structure is exacerbated by CGC's declining rate block.

The Consumer Advocate cites the Direct Testimony of CGC witness, Daniel J. Nikolich, in TRA Docket No. 06-00175:

Q. Does this structure properly align the customers' and the Company's interest in terms of conservation, revenue stability, and fairness?

A. No. The current rates penalize the customer for conservation through the declining block structure. In addition, by using a monthly rate with a declining block, the rates tend to encourage poor load factor utilization of CGC's distribution....In fact, the incentive is the opposite, i.e. to promote additional consumption as price per therm decreases as a customer uses more gas.

<http://www.state.tn.us/tra/orders/2006/0600175c.pdf> Page 9, Lines 3-6 and Lines 17-19.

Additionally, Mr. Nikolich writes: "The other form of reduced consumption is what I call price conservation. With price conservation, if the price is sufficiently high, customers make a

decision to be less comfortable and lower their thermostat in order to save on their heating costs.” <http://www.state.tn.us/tra/orders/2006/0600175c.pdf> Page 5, Lines 14-17.

With respect to conservation, the current rate structure, which has higher volumetric and lower fixed rates, incents consumers to conserve more than the rate structure proposed by CGC.

DISCOVERY REQUEST NO. 29:

Please quantify the degree to which Mr. Buckner believes that the Company’s proposed changes to monthly customer charges will impact the conservation efforts of customers. Please provide all supporting documentation and workpapers associated with Mr. Buckner’s estimates.

RESPONSE: See Consumer Advocate’s response to CGC’s Discovery Request #28.

DISCOVERY REQUEST NO. 30:

Please provide a complete rate design and proof of revenues that shows the existing and proposed rate for each base rate charge for each rate class associated with the rate design recommendation set forth in Mr. Buckner’s testimony. Please provide the proposed rate design and all supporting documentation and workpapers in electronic form with all formulas intact.

RESPONSE: See Consumer Advocate Rate Design, Schedule 1 filed with CGC on March 10, 2010.

DISCOVERY REQUEST NO. 31:

Please provide all supporting workpapers and source documents to Exhibit DED-2 from the direct testimony of CAPD witness Dismukes.

RESPONSE: See file: DED Response to CGC No 31, Exhibits DED-1, 2, 4, 5, 6 and 9.xlsx.

DISCOVERY REQUEST NO. 32:

Please provide all supporting workpapers and source documents to Exhibit DED-13 from the direct testimony of CAPD witness Dismukes.

RESPONSE: See files: DED Response to CGC No 32, Exhibit DED-13.xlsx; and DED Response to CGC No 32, Exhibit DED-13, Source Document.pdf.

DISCOVERY REQUEST NO. 33:

Please provide all supporting workpapers and source documents to Exhibit DED-15 from the direct testimony of CAPD witness Dismukes.

RESPONSE: See file: DED Response to CGC No 33, Exhibit DED-15, Source Document.pdf.

DISCOVERY REQUEST NO. 34:

Please provide all supporting workpapers and source documents to Exhibit DED-16 from the direct testimony of CAPD witness Dismukes. Please indicate whether the data presented in Exhibit DED-16 are weather-normalized.

RESPONSE: See file: DED Response to CGC No 34, Exhibit DED-16.xlsx.

DISCOVERY REQUEST NO. 35:

Please provide all supporting workpapers and source documents to Exhibit DED-17 from the direct testimony of CAPD witness Dismukes.

RESPONSE: See files: DED Response to CGC No 35, Exhibit DED-17.xlsx; and DED Response to CGC No 35, Exhibit DED-17, Source Documents.pdf.

DISCOVERY REQUEST NO. 36:

Please provide all supporting workpapers and source documents to Exhibit DED-20 from the direct testimony of CAPD witness Dismukes.

RESPONSE: See file: DED Response to CGC No 36, Exhibit DED-20, Source Documents.pdf.

DISCOVERY REQUEST NO. 37:

Please provide all supporting workpapers and source documents to Exhibit DED-22 from the direct testimony of CAPD witness Dismukes.

RESPONSE: See files: DED Response to CGC No 37, Exhibit DED-22.xlsx; and DED Response to CGC No 37, Exhibit DED-22, Source Documents.zip.

DISCOVERY REQUEST NO. 38:

Please provide copies of all documents, summaries, charts, trade articles, journals, treatises, publications, workpapers, and other materials relied upon by Dr. Dismukes in formulating his direct testimony or that Dr. Dismukes plans to utilize at hearing in this proceeding.

RESPONSE: See files: DED Response to CGC No 38, Source Documents 1.pdf; DED Response to CGC No 38, Source Documents 2.pdf; DED Response to CGC No 38, Source Documents 3.pdf; DED Response to CGC No 38, Source Documents 4.pdf.

This response includes any documents that are not provided in other responses.

DISCOVERY REQUEST NO. 39:

Please provide copies of all independent articles and publications cited by Dr. Dismukes in his testimony.

RESPONSE: See response to Discovery Request No. 38.

DISCOVERY REQUEST NO. 40:

Please provide copies (or a link to publicly available electronic copies) of all prior testimony of Dr. Dismukes on matters pertaining to natural gas rate design or revenue decoupling.

RESPONSE: See file: DED Response to CGC No 40, Testimony.pdf.

DISCOVERY REQUEST NO. 41:

Please provide copies of excerpts of source documents related to revenue decoupling mechanisms implemented in other jurisdictions that were relied upon to develop Dr. Dismukes' testimony including relevant utility tariffs, stipulations and Commission Orders.

RESPONSE: See files: DED Response to CGC No 41, Source Documents 1.pdf; and DED Response to CGC No 41, Source Documents 2.pdf.

DISCOVERY REQUEST NO. 42:

Please state Dr. Dismukes' opinion regarding the potential role that CGC has or may have in promoting energy efficiency and conservation by customers. Please explain the basis for Dr. Dismukes' opinion including any relevant research, publications or other documents.

RESPONSE: Dr. Dismukes believes that CGC, like any other regulated utility, has the responsibility to provide safe, economic, and reliable service to its ratepayers. CGC, like any other regulated utility, has a responsibility to invest in any resource, including energy efficiency, if the net present value of revenue requirement associated with utilizing that resource to provide service is less than its next best alternative, holding other factors constant.

Dr. Dismukes bases his opinion on over 22 years of professional experience as outlined in his resume provided as Attachment 1 to his direct testimony.

DISCOVERY REQUEST NO. 43:

Please describe Dr. Dismukes' relationship with NASUCA. Indicate whether Dr. Dismukes has collected any fees from NASUCA.

RESPONSE: Dr. Dismukes serves as an advisor to the NASUCA gas committee and speaks regularly on energy market and policy issues at NASUCA conferences and meetings.

DISCOVERY REQUEST NO. 44:

Please provide copies of all presentations or other documents and materials prepared by Dr. Dismukes or Acadian Consulting Group for NASUCA.

RESPONSE: See file: DED Response to CGC No 44, Presentations.pdf.

DISCOVERY REQUEST NO. 45:

Reference page 3, lines 16-18 of Dr. Dismukes testimony. Please describe Dr. Dismukes' understanding of Tennessee's "energy conservation policy". Provide the bases for Dr. Dismukes' opinions including copies of all supporting information and documents.

RESPONSE: Dr. Dismukes believes this policy is articulated in Public Chapter 531 of the Tennessee Code Annotated. This is available to the Company on the internet at: www.state.tn.us/sos/acts/106/pub/pc0531.pdf.

This policy, as it relates to natural gas utilities, is furthered by recent decisions of the Tennessee Regulatory Authority, including:

- Petition of the Consumer Advocate to Open an Investigation to Determine whether Atmos Energy Corp. should be Required by the Tennessee Regulatory Authority to Appear and Show Cause that Atmos Energy Corp. is not Overearning in Violation of Tennessee Law and that it is Charging Rates that are Just and Reasonable, TRA Docket No. 05-00258, Transcript of Authority Conference, October 26, 2006.
- Petition of Piedmont Natural Gas, Inc. for Approval of Service Schedule No. 317 and Related Energy Efficiency Programs, TRA Docket No. 09-00104, Transcript of Authority Conference, January 25, 2010.

These filings can be found at: <http://tennessee.gov/tra/indexes/docketregular.htm>

DISCOVERY REQUEST NO. 46:

Please indicate whether Dr. Dismukes believes that the TRA's decision in Docket No. 09-00104 establishes a precedent that applies to CGC in this proceeding. In particular, please explain any limitations on the potential outcome in this proceeding based upon Dr. Dismukes' understanding of the TRA's decision in Docket No. 09-00104. Fully explain all bases for Mr. Dismukes' opinions and beliefs.

RESPONSE: Yes. From a policy perspective, rather than a legal one, Dr. Dismukes believes that the TRA's decisions regarding decoupling sets precedent by contributing and clarifying the TRA's on-going concerns regarding revenue decoupling and its major flaws and shortcomings which can hardly be ignored in this matter

Dr. Dismukes does not understand the Company's question regarding "limitations on the potential outcome in this proceeding" and cannot provide a complete answer at this time. However, given Dr. Dismukes interpretation of the plain intent of the question, and the prior caveat, he is not aware of any "limitations" in this proceeding at this time.

DISCOVERY REQUEST NO. 47:

Please explain how the implementation of the proposed AUA would lead to changes in CGC's approach to cost efficiency. Please also provide supporting examples.

RESPONSE: This has been clearly articulated, and cited, by Dr. Dismukes on page 38 of his direct testimony where he notes:

Trackers of all types, including revenue decoupling, will ultimately lead to higher utility costs because they eliminate the positive incentives of regulatory lag on a utility's ongoing operational costs. It is a basic economic fact that rational utility management has little incentive to control costs (operational and capital) if it has no effect on the utility's profits, which is precisely the situation that occurs when a utility is able to pass higher costs through to ratepayers with little to no regulatory scrutiny and with minimal consequences on sales.

DISCOVERY REQUEST NO. 48:

Please explain how the implementation of the proposed AUA would lead to changes in CGC's approach to risk management. Please also provide supporting examples.

RESPONSE: See Response to Discovery Request No. 47.

DISCOVERY REQUEST NO. 49:

Reference page 4, line 4 of Dr. Dismukes' testimony. Please provide a complete definition of "traditional regulation."

RESPONSE: Traditional regulation is based upon the premise that utilities have an obligation to provide safe, economic, and reliable service in return for the opportunity to earn a return on and of their prudently-incurred investments, as well as recovery of their prudently-incurred expenses. Traditional regulation exercises this premise through a rate case process where utilities are required to prove that their investments and expenses were reasonable and prudently-incurred.

Prudently-incurred costs and investments are then recovered through a fixed series of rates that do not change until such time as a regulatory commission finds that in fair, just, and reasonable to do so through a later rate case process.

DISCOVERY REQUEST NO. 50:

Reference page 4, lines 6-7 of Dr. Dismukes' testimony. Please provide specific excerpts and associated citations supporting the referenced testimony concerning prior TRA findings.

RESPONSE: All excerpts were already provided in Dr. Dismukes' direct testimony.

DISCOVERY REQUEST NO. 51:

Reference page 4, lines 14-15 of Dr. Dismukes' testimony. Please define "financial harm" and provide a full description of what is necessary to demonstrate that financial harm has not been created.

RESPONSE: Financial harm occurs when a utility's ability to earn a reasonable rate of return is significantly compromised in the course of providing safe, economic, and reliable service.

DISCOVERY REQUEST NO. 52:

Reference page 5, lines 6-9 of Dr. Dismukes' testimony. Please fully explain the distinction between "revenue decoupling" and "revenue stabilization" as used by Dr. Dismukes in his testimony.

RESPONSE: Revenue stabilization can include, but is not limited to, other types of non-volumetric rates including weather normalization, SFV rates, and tracking mechanisms such as gas cost trackers, infrastructure recovery mechanisms, and weather normalization adjustments.

DISCOVERY REQUEST NO. 53:

Reference page 34, line 28 through page 35, line 1 of Dr. Dismukes' testimony. Please explain in detail the bases for Dr. Dismukes' conclusion that the "TRA's current regulatory approach provides ample opportunities for CGC, and other regulated utilities, to provide cost-effective energy efficiency service to its ratepayers." Provide all supporting materials for Dr. Dismukes' opinion.

RESPONSE: See Response to Discovery Request No. 42.

DISCOVERY REQUEST NO. 54:

Reference page 38, lines 8-10. Please explain in detail how the Company's proposed AUA will "lead to higher utility costs."

RESPONSE: See Response to Discovery Request No. 47.

DISCOVERY REQUEST NO. 55:

Reference page 38, lines 13-14. Please explain in detail how the Company's proposed AUA will allow CGC to "pass higher costs through to ratepayers."

RESPONSE: See Response to Discovery Request No. 47.

DISCOVERY REQUEST NO. 56:

Reference Dr. Dismukes' testimony at page 53, lines 7-20. Please provide copies of any documents prepared by either (i) Central Maine Power, (ii) the Maine Public Utilities Commission, or (iii) other interveners in proceedings related to CMP's Electric Revenue

Adjustment Mechanism that Dr. Dismukes has reviewed or consulted in formulating his opinion regarding that mechanism.

RESPONSE: See file: DED Response to CGC No 56, MPUC.pdf.

DISCOVERY REQUEST NO. 57:

Reference Dr. Dismukes' testimony at page 53, lines 7-20. Please provide a breakdown of the total deferral by year under CMP's ERAM that is attributable to the categories Dr. Dismukes specifically identified in his testimony including "conservation efforts" and "economic recession." If Dr. Dismukes has analyzed other categories of factors that contributed to CMP's deferral of \$52 million noted in his testimony, please also provide that analysis. Please provide all supporting documentation and workpapers.

RESPONSE: Dr. Dismukes does not have a breakdown of these numbers.

DISCOVERY REQUEST NO. 58:

Provide copies of all energy efficiency cost effective analyses prepared by Dr. Dismukes including all related explanatory materials.

RESPONSE: Dr. Dismukes' experience in conducting and examining various cost-effectiveness analyses dates back to the early 1990s and his work in Florida examining the cost-effective potentials for DSM goals as required under the Florida Energy Efficiency and Conservation Act. Dr. Dismukes prepared testimony examining these potentials for Florida Power & Light Company, Gulf Power Company, Florida Power Corporation (now Progress Energy Florida), and Tampa Electric Company. Dr. Dismukes is searching for an electronic version of this testimony and will provide this to the Company once it has been located.

Dr. Dismukes has also provided expert advice and consulting on a number of cost-effectiveness analyses and has served as a representative for various clients on Energy Efficiency Advisory Boards examining cost effectiveness analyses and potentials for various natural gas energy efficiency programs. Dr. Dismukes has served on the advisory boards in Utah (on behalf of the Office of Consumer Services) and Washington (on behalf of the Office of the Attorney General). Dr. Dismukes also provided expert analysis and consulting advice to the New Jersey Division of Rate Counsel on the various electric and natural gas energy efficiency cost-effectiveness analyses that were filed by the state's electric and gas utilities under Governor Corzine's stimulus plan. None of these analyses were part of litigated proceedings and are considered attorney work-product and are privileged to each of the clients referenced.

Dr. Dismukes has examined the cost-effectiveness of the natural gas conservation program filed by Piedmont Natural Gas Company. That testimony has been provided in Response to CGC No 40.

Dr. Dismukes also examined the cost-effectiveness of the natural gas conservation program filed by Texas Gas Service in its most recent rate case. That testimony has been also been provided in Response to CGC No 40.

Dr. Dismukes is also examining cost effectiveness issues associated with El Paso Electric Company's energy efficiency programs. Dr. Dismukes has not filed testimony on this matter at the current time.

DISCOVERY REQUEST NO. 59:

Please provide copies of all texts that Dr. Dismukes considers to be authoritative on the subject of energy efficiency cost effective analyses.

RESPONSE: The AG objects to this request as being broad and burdensome. Further, making complete copies of the textbooks considered authoritative on energy efficiency cost effectiveness analysis would challenge current U.S. copyright laws.

Despite this objection, Dr. Dismukes responds as follows: All texts cited in Dr. Dismukes' Direct Testimony are texts Dr. Dismukes relies upon.

DISCOVERY REQUEST NO. 60:

Please provide the last 5 testimonies prepared by Dr. Klein related to the cost of equity for gas utilities and provide the authorized returns on equity from those cases.

RESPONSE: Dr. Klein's last five testimonies related to cost of equity for gas utilities were during his employment with the Tennessee Public Service Commission, 1986-1996. For a listing of the Dockets that likely would have included such testimony, see page 30 of Dr. Klein's testimony in this Docket, particularly those dockets involving natural gas companies. Neither Dr. Klein nor the Consumer Advocate have any documentation or recollection about the testimony or proposed rate of return in any of those Dockets. Dr. Klein no longer has copies of this testimony, nor of the Commission's final Orders in these proceedings. Similarly, the Consumer Advocate also does not have copies of this testimony or the resulting Final Orders.

DISCOVERY REQUEST NO. 61:

Please provide Exhibits 1, 2, 3, 5, 7 and 8 of Dr. Klein's testimony in electronic spreadsheet form, with all links and formulas intact.

RESPONSE: Dr. Klein did not make use of spreadsheets in preparing these exhibits, with the exception of Exhibit 8. That spreadsheet is provided as an Attachment to these Responses.

DISCOVERY REQUEST NO. 62:

For the regression equations presented in Exhibit 8 of Mr. Klein's testimony, please provide the resulting R^2 , Adjusted R^2 , and standard error of estimate for each equation.

RESPONSE: See Response to Discovery Request No. 61, and the Attachments to these Responses.

DISCOVERY REQUEST NO. 63:

For each of the regression equations presented in Exhibit 8 of Mr. Klein's testimony, please provide the standard Analysis of Variance (ANOVA), with sum squares, degrees of freedom, mean, square, F-Test value and significance values for the regression, the residual and the total. Please state whether each equation passes an F-test.

RESPONSE: See Response to Discovery Request No. 61, and the Attachments to these Responses. Due to the small number of observations used for the regression analysis, the assumptions required for the validity of the F-test are not met. Consequently, the F-test is not reliable and the apparent failure of these equations to pass the F-test is not a valid or reliable result.

DISCOVERY REQUEST NO. 64:

For each of the regression equations presented in Exhibit 8 of Mr. Klein's testimony, please provide the un-standardized regression coefficients with their associated standard error, un-standardized coefficients (Beta), T values, and significance. Please state whether each variable in each regression passes the T-test for significance.

RESPONSE: See Response to Discovery Request No. 61, and the Attachments to these Responses. Due to the small number of observations used for the regression analysis, the assumptions required for the validity of the t-test are not met. Consequently, the t-test is not reliable and the apparent failure of the coefficients to pass the t-test is not a valid or reliable result.

DISCOVERY REQUEST NO. 65:

Reference page 12, lines 4-5 of Mr. Dismukes' testimony. Please provide all support for Dr. Dismukes' position that "many of these expenditures appear to be promoting the Company's image and creating goodwill."

RESPONSE: The Company's annual plan for customer outreach and education was provided in Response to CAPD Question 171. Dr. Dismukes' opinion was based on his review of this plan and the items that were listed relating to energy efficiency awareness efforts.

As Dr. Dismukes' explained on page 12 of his testimony that: "[t]otal expenditures on such items as advertising, booths at conventions, lapels, wallet cards, and other similar items comprise over 50 percent of the Company's educational program."

DISCOVERY REQUEST NO. 66:

Reference page 9, line 12 of Dr. Dismukes' testimony. Please provide all support for Dr. Dismukes' position that the referenced LDCs are "considered leaders in the development of energy efficiency programs."

RESPONSE: The companies listed in DED-2 were included in a survey conducted by the Southwest Energy Efficiency Project as indicated in the citation. A number of these companies

are also identified in the American Council for an Energy-Efficiency Economy ("ACEEE") publication, "Responding to the Natural Gas Crisis: America's Best Natural Gas Energy Efficiency Programs."

DISCOVERY REQUEST NO. 67:

Reference page 44, lines 10-11 and 21-22 of Dr. Dismukes' testimony. Please provide all support for Dr. Dismukes' position that "utility lost base revenues associated with energy efficiency programs are typically quite small" and "The differences in sales created by weather, the economy, commodity prices, and other factors usually account for greater changes in revenue than those resulting from utility-sponsored energy efficiency programs."

RESPONSE: This has been Dr. Dismukes experience in examining these issues in decoupling proceedings in other jurisdictions. See Response to Data Request No. 40 where Dr. Dismukes has examined this issue for other utilities.

DISCOVERY REQUEST NO. 68:

Reference page 49, lines 17-19 of Dr. Dismukes' testimony. Please provide all support for Dr. Dismukes' position that "Large and rapid decreases in energy use are not likely to arise from any market transformation program thereby causing potential financial harm for the Company."

RESPONSE: This conclusion is based upon Dr. Dismukes' 22 years of professional experience as outlined in Attachment 1 to his direct testimony.

DISCOVERY REQUEST NO. 69:

To the extent not previously provided, please provide copies of all workpapers that support Dr. Klein's testimony.

RESPONSE: Copies of Dr. Klein's workpapers are provided as an Attachment to these Responses.

DISCOVERY REQUEST NO. 70:

Please provide copies of the following publications identified in Exhibit 9 to Dr. Klein's testimony:

- a. "Regulatory Preferences and Utility Prices: Evidence From Natural Gas Distribution Utilities" Energy Economics, Vol. 21, N.1 1999.
- b. "Double Leverage and Strategic Financing Decisions" NRRI Quarterly Bulletin, V. II, N.3 September 1992.
- c. "Merger Incentives and Cost of Capital Regulation of Subsidiaries" Midsouth Journal of Economics and Finance, March 1988.
- d. "Rate of Return on Equity," National Conference of Unit Valuation Standards, Nashville, December 1987.

RESPONSE: Copies of the requested documents are provided as an Attachment to these Responses, except for "Rate of Return on Equity" requested in 70.d. Dr. Klein no longer possesses any copies of this presentation. The Consumer Advocate also does not have a copy of that presentation.

DISCOVERY REQUEST NO. 71:

To the extent not previously provided in response to CGC-1, please provide the following Economic Testimony identified in Exhibit 9 to Dr. Klein's testimony:

- a. CC Docket No. 89-624 (March 1990);
- b. TRA Docket 09-00104 – December 2009;
- c. Tennessee Public Service Commission (93-06946) December 1993;
- d. Tennessee Public Service Commission (91-03765) October 1991;
- e. Tennessee Public Service Commission (U-86-01363) February 1989; and
- f. Tennessee Public Service Commission (U-87-7499) October 1987.

RESPONSE: Dr. Klein's testimony in TRA Docket No. 09-00104 is accessible from the Tennessee Regulatory Authority's website. Dr. Klein no longer possesses copies of the testimony requested in 71. a. and c.- f. The Consumer Advocate also does not have copies of that testimony.

DISCOVERY REQUEST NO. 72:

Referencing Dr. Klein's testimony at page 8, lines 7-9, please provide any information, data or documentation that supports the assertion that "Mr. Hanson's figure likely represents a brief departure from the long range structure of AGL."

RESPONSE: See Exhibit 2 to Dr. Klein's pre-filed direct testimony in this Docket.

DISCOVERY REQUEST NO. 73:

Referencing Dr. Klein's testimony at page 9, lines 17-19, please explain what Dr. Klein considers to be "outside investors." Please explain whether Dr. Klein considers a holding company to be an "outside investor."

RESPONSE: An "outside investor" is an entity that does not have an affiliate relationship with the company whose stock it holds. An affiliate in this context refers to a subsidiary, parent, or other financial affiliate, such as another subsidiary of the same parent corporation. The term "outside investor" also excludes managers or board members of the firm whose stock is held or its affiliates. A holding company is not an outside investor.

DISCOVERY REQUEST NO. 74:

Referencing Dr. Klein's testimony at page 9, lines 18-19, please explain why AGL consolidated is the only entity that counts.

RESPONSE: According to CGC's Response to CAPD Discovery Question #89, CGC and AGL parent-only "do not issue external debt instruments." This indicates that AGL's finances are all managed at the consolidated level, with individual affiliates issuing or receiving loans from other affiliated entities as required to meet the individual affiliates' financing requirements. Moreover, investors have no opportunity to invest in any entity other than AGL consolidated. For these reasons, one cannot view individual affiliates as independent companies, but as centrally managed parts of AGL consolidated. Hence, "the consolidated costs (sic) of capital is the appropriate actual cost of debt for these companies." Consequently, the consolidated cost of equity is the appropriate cost of equity for CGC.

DISCOVERY REQUEST NO. 75:

Has Dr. Klein considered whether AGL investors can expect to earn returns from stock issuances at prices above book value? If not, why not? If so, please explain how Dr. Klein's analysis accounts for such issuances.

RESPONSE: Yes. AGL's investors will earn returns from stock issuances at stock prices above book value, but the return will be less than those earned on stock issued at book value, other things equal. The willingness of investors to buy the stock of a company at prices above book value per share indicates investors' expectation that the company's future rate of return to the book value of equity will exceed its current cost of equity.

DISCOVERY REQUEST NO. 76:

Referencing Dr. Klein's testimony at page 10, lines 11-12, please explain Dr. Klein's understanding of the time horizon of Value Line's projected dividend growth rate of 2.5%.

RESPONSE: According to Value Line, its projected growth rates cover "...the coming 3 to 5 years. All rates of change are computed from the average figure for a past 3 year period to an average for a future 3-year period." Value Line Investment Survey, "How to Invest in Common Stocks," p. 13.

DISCOVERY REQUEST NO. 77:

Is it Dr. Klein's testimony that Value Line's dividend growth projection extends over "an infinite time horizon?" Please explain your answer and provide any documents relevant to your response.

RESPONSE: The DCF model for computing the cost of equity makes the simplifying assumption that investors expect a constant growth rate in dividends over the indefinite future – or an infinite time horizon. This allows the formula for the present value of dividends from stock ownership to collapse to the familiar simple DCF formula of dividend yield plus a growth rate. Analysts’ dividend growth forecasts, including Value Line’s, are often used as estimates of the dividend growth rate for use in the DCF formula.

DISCOVERY REQUEST NO. 78:

Please provide copies of any analysis of the relative risk of the companies on Exhibit 3 performed, examined or relied upon by Dr. Klein in developing his recommendation in this proceeding.

RESPONSE: Dr. Klein relies on the information contained in his Exhibits 3 and 4, as well as Value Line’s “Ratings and Reports” for December 11, 2009.

DISCOVERY REQUEST NO. 79:

Referencing page 11, line 6 of Dr. Klein’s testimony, please define the term “riskiness” and explain how Dr. Klein evaluated it for purposes of his testimony. Please provide any documents relied upon by Dr. Klein in formulating an opinion as to the relative “riskiness” of the companies identified on Exhibit 3.

RESPONSE: Technically, risk is defined as the variability in the in the rate of return on an investment. In practice, the forward looking risk involved in an investment is difficult to estimate. Dr. Klein uses firms in the same industry, of similar size, and with similar values of the CAPM beta to select comparably risky firms. The result is shown on his Exhibits 3 and 4.

Dr. Klein made use of Value Line's "Ratings and Reports" for December 11, 2009 in making this selection.

DISCOVERY REQUEST NO. 80:

Please provide any analyses, prepared, considered or relied upon by Dr. Klein in evaluating the relative riskiness of AGL in comparison to the other companies identified on Exhibit 3.

RESPONSE: See Klein Exhibits 3 and 4; Value Line's "Ratings and Reports" for December 11, 2009; and the Direct Testimony of Roger A. Morin in this docket.

DISCOVERY REQUEST NO. 81:

Referencing Dr. Klein's testimony at page 11, lines 5-10, please identify:

- a. the total universe of natural gas utilities considered by Dr. Klein;
- b. the entities that were eliminated from his proxy group; and
- c. the reason they were eliminated.

RESPONSE: See below.

- a. The natural gas utilities covered by Value Line's "Ratings and Reports" for December 11, 2009.
- b. Dr. Klein eliminated Laclede Group, Nicor, Inc., NiSource, Inc., and UGI from this group.
- c. Laclede was eliminated because its market capitalization of \$700 million is less than \$1.0 billion. Nicor and NiSource were eliminated because Value Line's projected dividend growth is "Nil" for these firms. UGI was

eliminated because most of its business is in propane, not natural gas distribution.

DISCOVERY REQUEST NO. 82:

Referencing Dr. Klein's testimony at page 11, line 9, why is a total capitalization of \$1 billion or more a prerequisite to inclusion in his analysis?

RESPONSE: Value Line defines "Mid Cap" firms as those with market capitalization between \$1.0 billion and \$5.0 billion. Firms with market capitalization below \$1.0 billion are characterized as "Small Cap."

DISCOVERY REQUEST NO. 83:

Referencing Dr. Klein's testimony at page 11, line 23, please define the term "risk-free asset."

RESPONSE: A risk-free asset offers investors a (real – inflation adjusted) rate of return that is realized with certainty.

DISCOVERY REQUEST NO. 84

Please explain whether the term "multi-year period" used at page 12, line 17 means the same thing as the term "infinite time horizon" used at page 10, line 3. If not, explain the difference. In addition, please explain whether Dr. Klein believes that he is recommending a cost of equity applicable to a specific multi-year period or potentially for an infinite time horizon. If Dr. Klein believes that his proposed cost of equity should be applied only for a specific multi-year period, please identify the period.

RESPONSE: A “multi-year period” is not necessarily an “infinite time horizon,” although an “infinite time horizon” obviously involves multiple years. The passage cited (p. 12, l. 17) compares a 3-month T-bill, whose life is certainly less than a year, to setting a rate of return for a regulated utility. This rate of return will be in place until the next rate case, which will likely occur several years in the future. This “multi-year period” of uncertain length refers to the time between rate cases.

DISCOVERY REQUEST NO. 85

Is it Dr. Klein’s opinion that a “risk free” investment used in the CAPM model must eliminate the impact of projected inflation? If so, please explain your answer and provide any documents, studies or analyses that support your response.

RESPONSE: It is a well accepted principle in Economics and Finance that the “real,” or inflation adjusted, return is the appropriate measure of the return an investor actually receives on an investment. Almost any general economics or finance textbook will make this point. For example, Bloomberg (www.bloomberg.com/invest/glossary/) defines the real rate of return as “The actual payback on an investment after removing the effect of inflation.” Investopedia (www.investopedia.com) says, “Adjusting the nominal rate of return to compensate for factors such as inflation allows investors to determine how much of their nominal return is actually real return.” It then offers this example:

...let’s say your bank pays you interest of 5% per year on the funds in your savings account. If the inflation rate is currently 3% per year, then the real return on your savings would be 2%.which means that the real value of your savings only increases by 2% during a one-year period.

Further, the nominal interest rate fails to take into account inflation. "Not taking into account inflation gives a less realistic number."

That said, the risk-free rate does not need to "eliminate" the effect of projected inflation, historically interest rates yield returns in excess of inflation, but it should minimize the *risk* contributed by the failure of projected inflation to be realized. If one invests in a bond expecting a 5% nominal return with 2% inflation, but inflation turns out to be 3%, then the expected real return of $5\% - 2\% = 3\%$ is not realized. The real realized return is $5\% - 3\% = 2\%$. Inflation risk is associated with this possibility that the real expected return will not be realized due to unanticipated changes in the rate of inflation.

DISCOVERY REQUEST NO. 86

Is it Dr. Klein's opinion that the impact of inflation is different on investments in long term debt as opposed to equity over any given period? If so, please explain why and provide any documents, studies or analyses that support your response.

RESPONSE: Stock returns are negatively correlated with inflation, while interest rates and the income returns on bonds are positively correlated with inflation. This apparent anomaly has been studied many times. For an example, see "The Fiscal and Monetary Linkage Between Stock Returns and Inflation," by Robert Geske and Richard Roll, *The Journal of Finance*, 38(1), 1-33, March 1983.

DISCOVERY REQUEST NO. 87

Referencing Dr. Klein's testimony at page 12, lines 20-22, please explain why inflation risk raises the necessary return on a longer term bond above the risk-free rate.

RESPONSE: Inflation risk is based on the difference between the expected rate of inflation and the realized rate of inflation. Predicting the rate of inflation over long periods of time is more difficult than predicting the rate of inflation over a short period of time.

For example, an investor in a 20-year bond faces more uncertainty over the rate of inflation over the life of the bond than does an investor in a 1-year bond. The probability that the expected inflation rate is realized over a 20-year period is much lower than for a 1-year period. Further, the deviation of the realized rate of inflation from the expected rate could be much greater over a 20-year period than over a 1-year period. The investor in the 20-year bond faces higher inflation risk than does the investor in the 1-year bond (or even 20 sequential 1-year bonds) and will demand a higher return to compensate for that risk.

Ibbotson (See CGC's Response to CAPD Discovery Question #98) shows that the premium in excess of inflation for T-bills is only 70 basis points on average over 1926-2008, while the premium for Intermediate Term T-bonds is 160 basis points and for Long Term T-bonds is 210 basis points. These reflect the increasing inflation risk premium for longer term bonds.

DISCOVERY REQUEST NO. 88

Referencing Dr. Klein's testimony at page 13, lines 21 and 22, does Dr. Klein believe that the current risk premium is above historical averages? If so, by how much in terms of basis points? Please provide any studies, analyses or other documents that support your response.

RESPONSE: Dr. Klein has not determined the exact amount by which the current equity risk premium may exceed historical averages. The negative correlation of stock returns with inflation

implies that the equity risk premium shrinks when inflation, and interest rates, are high and expands when these rates are low. See response to request #86.

Just examining bond returns, Ibbotson (See CGC's Response to CAPD Discovery Question #98) shows that the average premium of Intermediate Government Bonds over Treasury bills for 1926-2008 is only 90 basis points. Current 5-year Treasury Bonds yield about 2.3% while T-bills yield about 0.2%, or a premium for 5-year bonds of 210 basis points. See Klein Exhibit 5 and response to CGC's Request #69.

DISCOVERY REQUEST NO. 89

On page 3 of Dr. Klein's testimony at lines 21-22, he states that the risk premium tends to expand when interest rates are low and shrink when interest rates are high. Please provide any studies, analyses or documents that support this statement and explain how Dr. Klein has applied this statement in formulating his recommendation in this case.

RESPONSE: See response to request #88.

DISCOVERY REQUEST NO. 90

Referencing Dr. Klein's testimony at page 14, line 2, please define the term "slightly" and, if possible, state what number of basis points is equivalent to a "slight" underestimate.

RESPONSE: By the term "slightly," Dr. Klein means "by a small amount." Dr. Klein has not determined the exact number of basis points that constitute a "slight" underestimate of the CAPM cost of equity. See also response to request #88.

DISCOVERY REQUEST NO. 91

On page 14, line 6, please define the term “significantly” as it is used in Dr. Klein’s testimony.

RESPONSE: The term “significantly” means “greatly, to a large extent or degree” or “importantly, in an important or fundamental way” according to the Encarta Dictionary.

DISCOVERY REQUEST NO. 92

Referencing Dr. Klein’s testimony at page 15, lines 6-8, please provide:

- a. any studies, analyses or other documents that compare the risks of AGL, and CGC to Dr. Klein’s comparable groups or Dr. Morin’s comparable groups; and
- b. any studies, analyses or other documents that compare the risk of electric utilities to the risk of gas utilities.

RESPONSE: The only materials used by Dr. Klein that compared the risks of various firms or industries were Value Line publications, especially “Ratings and Reports” for December 11, 2009.

DISCOVERY REQUEST NO. 93

Referencing Dr. Klein’s testimony at page 15, lines 18 and 19, please explain and provide any studies, analyses or other documents that support the statement that “The difference between stock returns and a risk-free rate of return reflects only the added risk embodied in stocks.”

RESPONSE: Any rendition of the CAPM will use an equation such as the following

$$r_j = r_f + \beta_j(r_m - r_f)$$

where r_j is the return on stock j , r_f is the risk free rate of return, and r_m is the return on the market portfolio. This shows that the β for stock j measures the risk in stock j that requires

compensation in the market. In the CAPM, investors demand compensation for risk. The only reason for one investment to offer a higher return than another is to compensate investors for higher risk. See, for example, *Cost of Capital*, by A. Lawrence Kolbe and James R. Read, Cambridge: MIT Press, 1984.

DISCOVERY REQUEST NO. 94

Referencing Dr. Klein's testimony at page 16, lines 17 and 18, please explain and provide any documents that support the statement that quarterly payment of dividends reduce the cost of equity.

RESPONSE: If dividends are paid quarterly, instead of once at the end of the year, then investors realize a higher return due to the time value of money. This is reflected in the ability of investors to reinvest dividends that are paid quarterly until the end of the year.

End of year value of \$5.00 dividend paid at the end of the year: \$5.00

End of year value of four quarterly dividends of \$1.25 reinvested at 10% interest =
 $(\$1.25)(1 + 0.075) + (\$1.25)(1 + 0.05) + (\$1.25)(1 + 0.025) + \$1.25 = \$5.1875$

Suppose investors require a 10% payment at the end of the year for an investment of \$50.00. This is the \$5.00 paid at the end of the year. If instead, investors are paid \$1.25 per quarter, the result is worth \$5.1875 at the end of the year, or 10.375%. Thus, investors require less than \$1.25 paid quarterly to yield a 10% return at the end of the year.

DISCOVERY REQUEST NO. 95

Referencing Dr. Klein's testimony at page 15, line 22 through page 16, line 2, please provide any studies, analyses or other documents that support the claim that "the price of utilities' stock will increase due to lower debt costs."

RESPONSE: If a firm's debt costs fall, other things equal, its profits or earnings rise. Investors will then bid up the price of the stock to reflect the higher expected return. One may also see this in the tendency of stock returns to increase when interest rates fall. See also response to request #86.

DISCOVERY REQUEST NO. 96

Referencing Dr. Klein's testimony at page 17, line 6, please describe AGL's "current decoupling status."

RESPONSE: One does not need to know AGL's "actual decoupling status" for the estimated cost of equity for AGL to reflect this status. Nevertheless, Dr. Klein understands that AGL, the gas distribution utility in Georgia, has some form of Straight-Fixed-Variable rate design in place that is similar to decoupling and that a decoupling plan for CGC is pending in this docket.

DISCOVERY REQUEST NO. 97

Referencing Dr. Klein's testimony at page 17, line 17 through page 18, line 7, please provide any studies, analyses, workpapers or documents that support the claims made in this passage of testimony.

RESPONSE: See Klein Exhibit 6.

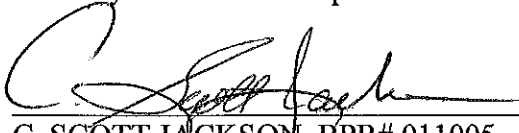
DISCOVERY REQUEST NO. 98

Referencing Dr. Klein's testimony at p. 20, line 7, what is the basis of the stated 10% reduction in risk. Please provide any studies, analyses or other documents that support your claim.

RESPONSE: See Klein Exhibits 6, 7, and 8; and Dr. Klein's Testimony in TRA Docket No. 09-00104 referenced in CGC's request #71.

Respectfully Submitted,

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Dated: March 29, 2010.

CERTIFICATE OF SERVICE

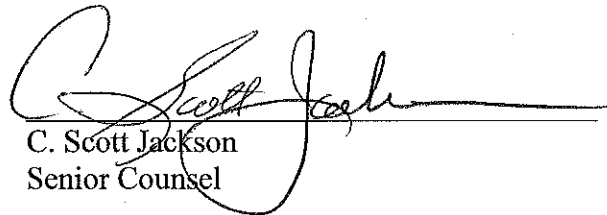
I hereby certify that a true and correct copy of the foregoing was served via first-class U.S. Mail, postage prepaid, or electronic mail upon:

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This the 29th day of March, 2010.



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