EXHIBIT
209

Exhibit No.:	
Issue(s):	Statistical Analysis/ Rate Design Proposals/ Connection and Reconnection Fee/ Low-Income Proposal
Witness/Type of Exhibit:	Meisenheimer/Rebuttal
Sponsoring Party:	Public Counsel
Case No.:	GR-2004-0209

REBUTTAL TESTIMONY

OF

BARBARA A. MEISENHEIMER

Submitted on Behalf of the Office of the Public Counsel

MISSOURI GAS ENERGY

CASE NO. GR-2004-0209

May 24, 2004

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the matter of Missouri Gas Energy's tariffs to implement a general rate increase for natural gas service.	)))	Case No. GR-2004-0209

AFFIDAVIT OF BARBARA A. MEISENHEIMER

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Barbara A. Meisenheimer, of lawful age and being first duly sworn, deposes and states:

1. My name is Barbara A. Meisenheimer. I am Chief Utility Economist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony consisting of pages 1 through 29 and Schedules 1 and 2.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Barbara A. Meisenheimer

Subscribed and sworn to me this 24th day of May 2004.

KATHLEEN HARRISON
Notary Public - State of Missouri
County of Cole
My Commission Expires Jan. 31, 2006

Kathleen Harrison
Notary Public

My Commission expires January 31, 2006.

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REBUTTAL TESTIMONY

OF

BARBARA MEISENHEIMER

CASE NO. GR-2004-0209

MISSOURI GAS ENERGY

I. INTRODUCTION

Q. **PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.**

A. Barbara A. Meisenheimer, Chief Utility Economist, Office of the Public Counsel, P. O. 2230, Jefferson City, Missouri 65102.

Q. **PLEASE SUMMARIZE YOUR EDUCATIONAL AND EMPLOYMENT BACKGROUND.**

A. I hold a Bachelor of Science degree in Mathematics from the University of Missouri-Columbia (UMC) and have completed the comprehensive exams for a Ph.D. in Economics from the same institution. My two fields of study are Quantitative Economics and Industrial Organization. My outside field of study is Statistics. I have taught Economics courses for the following institutions: University of Missouri-Columbia, William Woods University, and Lincoln University. I have taught courses at both the undergraduate and graduate levels.

Q. **HAVE YOU TESTIFIED PREVIOUSLY IN THIS CASE?**

A. Yes, I filed direct testimony on revenue requirement issues on April 15, 2004 and rate design issues on April 22, 2004.

Q. **WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. The purpose of my testimony is to respond to portions of the direct testimony of John Dunn and Jay Cummings filed on behalf of Missouri Gas Energy (MGE)

and the testimonies of Tom Imhoff, Anne Ross and Dan Beck filed on behalf of the Missouri Public Service Commission Staff.

II. RESPONSE TO MGE'S STATISTICAL ANALYSIS

Q. HAVE YOU REVIEWED MR. DUNN'S TESTIMONY AND HIS UNDERLYING STATISTICAL ANALYSIS PERFORMED IN SUPPORT OF MGE'S PROPOSED UPWARD ADJUSTMENT TO THE RATE OF RETURN BASED ON THE COMPANY'S RISK RELATIVE TO THE PROXY GROUP.

A. Yes, I have.

Q. DO YOU BELIEVE THAT MR. DUNN'S TESTIMONY AND UNDERLYING STATISTICAL ANALYSIS SUPPORT AN UPWARD ADJUSTMENT TO THE RATE OF RETURN BASED ON THE COMPANY'S RISK RELATIVE TO THE RISK OF THE PROXY GROUP COMPANIES.

A. No, I do not. Mr. Dunn has performed an "apples to oranges" comparison of the Company's risk relative to the proxy group that does not support the upward adjustment the Company seeks.

Mr. Dunn's measures of the mean, standard deviation and coefficient of variation have very little relevance in comparing MGE's risk to the risk of the proxy group companies because he relies on layers of averaging within his proxy group calculations. The resulting aggregated statistical measures derived from this process do not provide a meaningful comparison to the single company statistics he derives for MGE. Schedule 1 provides my analysis of Mr. Dunn's calculations and my concerns with those calculations.

Q. **PLEASE DEFINE AND EXPLAIN THE STATISTICAL MEASURES YOU REFER TO IN YOUR TESTIMONY.**

A. The mean, standard deviation, variance and coefficient of variation are measures of the level of potential returns and variability in the probability that each potential return will occur.

Variance is a measure of variability that characterizes the dispersion of expected occurrences of all potential returns. Numerically, the variance equals the average of the all squared deviations from the population mean. The standard deviation of a population is another measure of variability derived as the square root of the variance. The standard deviation tends to be a more understandable measure of variability because it measures dispersion about the mean in the same units as the original data. Neither the variance or standard deviation are "scaled" measures that facilitate proportional comparisons between different populations, therefore, comparisons between populations are difficult unless the comparison is between populations with similar means.

The coefficient of variation is calculated as the standard deviation divided by the mean. The coefficient of variation is scaled to expresses variability in proportion to the mean so comparisons to other populations' coefficients of variation may be meaningful even when the underlying population means differ.

Q. **WHAT IS THE DIFFICULTY IN EVALUATING AN EXPECTED RETURN?**

A. The difficulty in evaluating an expected return is that the exact mean and variability of all potential returns is likely unknown so samples must be relied

upon in developing estimates of measures of the level and variability of potential occurrences.

A properly performed statistical analysis based on a sample of companies believed to have characteristics that mirror the underlying population can provide insight in establishing a rate of return that allows the regulated utility a reasonable opportunity to be competitive in attracting capital based on comparable estimated risk characteristics. The mean returns of similarly situated sample companies provide a guide to an adequate level of return necessary to competitively attract capital. The sample values of variance, standard deviation, and coefficients of variation provide insight into the amount of variability from the sample mean that should be expected.

To the extent that the purpose of regulation is to establish a rate of return for a regulated utility that offers a comparable ability to attract capital as alternative investments, it is reasonable to evaluate both the level and potential variability of the regulated utility's performance to that of a sample group of similarly situated companies. The variability about the mean is a standard measure of that risk that is used in financial analysis.

Q. **WOULD COMPARING MEASURES OF THE MGE MEAN RETURN, VARIANCE, STANDARD DEVIATION, AND COEFFICIENT OF VARIATION WITH THE INDIVIDUAL COMPANIES IN MR. DUNN'S PROXY GROUP BE MORE RELEVANT THAN A COMPARISON TO THE AGGREGATE MEASURES CONSTRUCTED BY MR. DUNN?**

A. Yes, it would because these measures are statistically more meaningful for comparative purposes.

My rebuttal testimony focuses on concerns regarding Mr. Dunn's development of statistical comparisons of risk between his proxy group companies and MGE. Public Counsel witness Travis Allen addresses concerns with Mr. Dunn's choice of the sample or proxy group of companies.

Q. **PLEASE IDENTIFY YOUR FIRST CONCERN WITH MR. DUNN'S ANALYSIS.**

A. Mr. Dunn uses an inappropriate series of mathematical averages of proxy group member characteristics in deriving the statistics he compares to MGE to determine relative risk. His initial step in his statistical analysis is to identify the returns for each year 1998-2002 for a group of 15 companies that he identifies as his proxy group. The proxy group companies are shown in Table 1.

Table 1.

COMPANY	1998	1999	2000	2001	2002	Mean
AGL RESOURCES, INC.	7.6%	5.7%	7.4%	6.5%	8.1%	7.1%
ATMOS ENERGY CORP	9.0%	5.1%	6.5%	5.9%	6.8%	6.7%
CASCADE NATURAL GAS	6.1%	7.5%	8.1%	8.5%	6.4%	7.3%
KEYSPAN CORP	NMF	7.1%	5.3%	**4.5%**	6.2%	5.8%
LACLEDE GAS COMPANY	8.1%	7.1%	6.7%	6.9%	6.0%	7.0%
NEW JERSEY RESOURCES	8.1%	9.0%	9.0%	8.5%	8.7%	8.7%
NICOR INC	**9.9%**	**10.9%**	**13.7%**	**12.3%**	**13.0%**	12.0%
NORTHWEST NATURAL GAS	**5.0%**	6.8%	6.7%	6.9%	5.9%	6.3%
NUI CORP	5.6%	6.1%	6.7%	5.6%	**2.8%**	5.4%
PEOPLES ENERGY CORP	7.8%	8.0%	9.5%	9.3%	8.4%	8.6%
PIEDMONT NATURAL GAS	9.2%	8.1%	8.3%	7.9%	7.8%	8.3%
SOUTH JERSEY INDUSTRIES	5.3%	7.4%	7.4%	6.9%	7.6%	6.9%
SOUTHWEST GAS CORP	5.8%	**4.8%**	**4.6%**	5.1%	4.5%	5.0%
UGI CORP	6.3%	6.7%	6.4%	7.1%	8.2%	6.9%
WGL HOLDINGS INC	8.0%	7.1%	7.9%	7.9%	5.3%	7.2%
Column Average	7.3%	7.2%	7.6%	7.3%	7.0%	

Q. **DOES HE PROVIDE SUPPORT TO SHOW THAT THE VALUES HE AVERAGES ARE DRAWN FROM A POPULATION WITH THE SAME MEAN OR VARIANCE?**

A. No. For each year, he calculates the mean return based on all company returns for the year. The averages are shown in the row labeled Column Average in Table 1. But this calculation lacks any evidence that the values he averages are drawn from a population with the same mean or variance. By calculating averages for each year and then using those averages as a sample of 5 points associated with a hypothetical distribution for comparison with MGE, he ignores that in fact the individual company sample returns may not be representative of points from a "like" distribution.

To the extent that returns are not significantly different based on a factor associated with time, one method for testing the likelihood that the values he averages come from like populations would be to test if the 5-year means shown in the last column are significantly similar for each of the companies.

Q. **WHAT MEASURE OF STATISTICAL RELIABILITY IS APPROPRIATE TO TEST THE SIMILARITY OF MEANS?**

A. Since the sample size for each company consists of only 5 data points (the return for each of the 5 years) it is reasonable to test the similarity of the means using what is known as a t-test. The t-test is used when underlying populations are assumed to approximate a normal distribution but the variances are not assumed to be equal and sample sizes are small.

Q. **DID YOU PERFORM A T-TEST?**

A. Yes. I performed a t-test for the similarity of means for each possible pairing of companies in Mr. Dunn's proxy group. Out of the 105 possible pairings I found only 6 instances where two means had a probability of at least 85% of coming from the same population.

Q. **DID YOU PERFORM ANY OTHER RELIABILITY TESTS?**

A. Yes. In addition, I performed what is known as an F-test to determine the extent to which two companies' data could be expected to come from populations with variances that are not significantly different. I found that in only 15 of 105 possible parings companies could be expected to come from populations with variances that are not significantly different.

Q. **WHAT DO THESE TESTS INDICATE TO YOU?**

A. These tests cast serious doubts about Mr. Dunn's conclusions. While there may be value in comparing MGE risk characteristics with those of at least some of the proxy group companies, my analysis demonstrates that Mr. Dunn's calculations attempt to unreasonably homogenize unlike distribution characteristics and should be rejected.

Schedule 2 to my testimony graphically illustrates the affect of Mr. Dunn's averaging process in diluting the actual historic variation of company returns. The column averages that I discussed earlier and which Mr. Dunn uses for comparison with MGE are shown in red. Please take note on how closely they are clustered compared to the plots for individual companies. This close distribution reduces the characterization of risk relative to the individual companies and to MGE.

Q. **HOW DOES MR. DUNN'S AVERAGING PROCESS AFFECT THE STATISTICAL COMPARISONS OF RISK FOR MGE AND THE PROXY GROUP COMPANIES?**

A. After averaging the annual returns for the proxy group companies to arrive at the 5 sample points, Mr. Dunn derives a measure of the mean, standard deviation and coefficient of variation associated with the 5 sample points. To illustrate my concerns with this method, I have provided Table 2. which compares the proxy companies' and MGE's statistics with the average based statistics derived by Mr. Dunn.

Table 2.

COMPANY	Mean	Std. Dev.	Variation
AGL RESOURCES, INC.	7.06%	0.96%	13.53%
ATMOS ENERGY CORP	6.66%	1.46%	21.93%
CASCADE NATURAL GAS	7.32%	1.04%	14.28%
KEYSPAN CORP	5.78%	1.12%	19.46%
LACLEDE GAS COMPANY	6.96%	0.76%	10.92%
NEW JERSEY RESOURCES	8.66%	0.38%	4.37%
NICOR INC	11.96%	1.55%	12.95%
NORTHWEST NATURAL GAS	6.26%	0.81%	12.91%
NUI CORP	5.36%	1.50%	28.00%
PEOPLES ENERGY CORP	8.60%	0.76%	8.89%
PIEDMONT NATURAL GAS	8.26%	0.56%	6.77%
SOUTH JERSEY INDUSTRIES	6.92%	0.94%	13.61%
SOUTHWEST GAS CORP	4.96%	0.52%	10.53%
UGI CORP	6.94%	0.77%	11.10%
WGL HOLDINGS INC	7.24%	1.14%	15.80%
Mr. Dunn's Averaged Calculation	7.28%	0.21%	2.88%
MGE	5.79%	1.10%	18.97%

The Commission should note that Mr. Dunn's standard deviation result and coefficient of variation result are lower than every individual company result for his proxy group. The averaging technique used in his analysis does not produce a comparable evaluation of risk between MGE and the proxy group companies. As a result his analysis unreasonably overstates MGE's level of relative risk. Therefore, the risk adjustment proposed for MGE is not supportable and should be rejected by the Commission.

III. RESPONSE TO MGE'S RATE DESIGN PROPOSALS

Q. **WHAT PORTIONS OF DR. CUMMINGS'S TESTIMONY WILL YOU ADDRESS?**

A. I will respond to the volumetric rate design as well as miscellaneous service charge fee increases advocated by the Company.

Q. **PLEASE GENERALLY DESCRIBE THE COMPANY'S PROPOSED VOLUMETRIC RATE DESIGN.**

A. The Company seeks to replace its current rate structure with one that collects the lion's share of non-gas cost from an increase in the customer charge and establishment of "weatherproof" volumetric rates. The weatherproof volumetric rate schedule consists of collecting the majority of non-gas cost through charges associated with customer use of up to 68 Ccf per month during a six month winter season. Although I did not find it mentioned in the Company's testimony, the proposed rate design may necessitate a later increase in PGA/ACA rate adjustment to maintain full gas cost recovery. The remaining non-gas revenues would be collected though a summer rate for the remaining 6 months that would apply to all volumes and would not affect the PGA rate.

Q. **PLEASE SPECIFICALLY DESCRIBE THE PROPOSAL?**

A. Specifically the Company proposes to establish a first block rate of $ 0.32599 for gas consumption of up to 68 Ccf and $0.00 for consumption above 68 Ccf for the months November through April and a rate of $0.15525 that would apply to all consumption during the months May through October. Under the existing rate structure, a uniform rate of $0.11423 applies to all annual consumption. Also, the Company seeks to increase the customer charge from the current monthly rate of $10.05 to a rate of $13.55. A summary comparison of the existing rates and MGE's proposed rates is provided in Table 3.

Table 3.

	Customer Charge	Volumetric Rate<=68	Volumetric Rate>68	Anticipated PGA Rate<= 68	Anticipated PGA Rate<= 68
Proposed Nov.-April	$ 13.55	$0.32599	$0.0	$ 0.57982	0.90617
Proposed May-October	$ 13.55	$0.15525	$0.15525	$ 0.75056	$ 0.75056
Existing Rates	10.05	0.11423	0.11423	0.75056	0.75056

Q. **WHY DO YOU DESCRIBE MGE'S VOLUMETRIC RATE DESIGN PROPOSAL AS WEATHERPROOF?**

A. The Company's rate design proposal is weatherproof for the company because it eliminates virtually all risk associated with warmer than normal weather. Residential customer usage patterns illustrated in the direct testimony of MGE witness Dr. Cummings indicate that on average residential customers use more than 68 Ccf per month for the period December through April. The usage during this period represents approximately 78.4% of total annual usage for a residential

customer. As described in the rebuttal testimony of Public Counsel witness James Busch, even in warmer than normal weather residential usage would likely not be less than 68 Ccf per month during this period. Thus, MGE's rate design proposal locks in recovery of non-gas revenue over the period when the Company faces the greatest risk associated with warmer than normal weather. Likewise, when the average residential usage in November is below 68 Ccf, the Company's proposed winter usage rate would apply so the Company would be sheltered from the weather risk associated with November's additional 5.5% of annual residential use.

The remaining average annual usage of just over 16% occurs in the months May through October that are not characterized by substantial weather related risk to the Company. Therefore, the Company's winter rate design proposal coupled with minimal potential for detriment in the warm weather months virtually eliminates weather related risk to the Company and any potential earnings volatility associated with weather variations from normal.

Q. **HAVE YOU EVALUATED THE POTENTIAL IMPACT OF MGE'S PROPOSED RATE DESIGN ON RESIDENTIAL CUSTOMERS?**

A. Yes, I have studied this impact. My study was designed to isolate and compare MGE's proposed rate design with an alternative structure. MGE's rate design includes a first block rate of $ 0.32599 for gas consumption of up to 68 Ccf and $0.0 for consumption above 68 Ccf for the months November through April, a rate of $0.15525 that would apply to all consumption during the months May through October and an increase in the customer charge from $10.05 to $13.50.

For the alternative, I did not increase the customer charge from the $10.05 level and calculated a uniform volumetric increase of 0.08894198 to the existing rate of $.11423 for a combined increase of $.20317 that would apply to all volumes year round. Once again, my purpose was to produce an equivalent bill as that shown in Dr. Cummings's table on page 31 that occurs under MGE's proposed rate design at average residential use. Utilizing MGE's proposed rate design and the alternative I constructed, I was able to gauge the impact each rate design would have on an customer bill based on differing consumption levels that might result from weather variations. I evaluated the bill differences resulting from the two rate designs for the average consumption reported by Dr. Cummings. I also evaluated the bill differences based on a 10% higher winter use, 10% lower winter use, 20% higher winter use and 20% lower winter use than average consumption. Table 4 provides a summary of my results. For each design (shown as rows in Table 4), I have calculated the annual bill as the customer charge plus the appropriate volumetric non-gas and PGA rates multiplied by usage. Although not shown in Dr. Cummings's table, MGE's proposal affects annual gas cost recovery. I have calculated the annual PGA adjustment as the difference between gas cost at the current rate of $.75056 and the gas cost actually collected under each rate design.

Table 4.

Rate Design Impact On Residential Customers		At Average Residential Usage	10% Greater Winter Usage	10% Less Winter Usage	20% Greater Winter Usage	20% Less Winter Usage
Weatherproof Rate Design With Customer Charge Increase	Annual Bills	$ 958.93	$ 1,025.72	$ 892.15	$ 1,092.50	$ 825.37
	PGA ACA Adjustment	$ 11.94	$ 2.04	$ 21.84	$ (7.86)	$ 31.74
	Combined	**$ 970.87**	**$ 1,027.75**	**$ 913.99**	**$ 1,084.63**	**$ 857.11**
Uniform Volumetric Increase With No Customer Charge Increase	Annual Bills	$ 958.93	$ 1,029.22	$ 888.64	$ 1,099.51	$ 818.35
	PGA ACA Adjustment	$ -	$ -	$ -	$ -	$ -
	Combined	**$ 958.93**	**$ 1,029.22**	**$ 888.64**	**$ 1,099.51**	**$ 818.35**
Difference		**$ 11.94**	**$ (1.47)**	**$ 25.35**	**$ (14.88)**	**$ 38.76**

Q. PLEASE DESCRIBE YOUR FINDINGS.

A. As shown in Table 4, at average usage, the customer would pay the same total annual amount excluding ACA adjustments. However, residential customers' gas cost would be under-collected by approximately $12 annually. The Company may attempt to recover the shortfall through the ACA process. If the Company does recover the under-collection of gas cost through the ACA then MGE's proposed rate design ultimately costs customers more than the alternative.

As winter use grows customers may pay less on an annual basis under MGE's proposal for combined gas and non-gas costs. However, at average consumption customers actually pay more for gas during the months of January and February under the Company proposal than under a uniform rate of $.75056. With above average use, the likelihood increases of paying more for gas under

MGE's proposal than under a uniform rate during a winter month. I have illustrated the monthly affect in Table 5.

Table 5.

Month	Average Use	Uniform Rate Of .75056	Company Proposal
Nov	48	$ 36.03	$ 27.83
Dec	116	$ 87.06	$ 82.92
Jan	176	$ 132.10	$ 137.29
Feb	168	$ 126.09	$ 130.04
Mar	138	$ 103.58	$ 102.86
Apr	91	$ 68.30	$ 60.27
Month	10% Above Average Use	Uniform Rate Of .75056	Company Proposal
Nov	52.8	$ 39.63	$ 30.61
Dec	127.6	$ 95.77	$ 93.44
Jan	193.6	$ 145.31	$ 153.24
Feb	184.8	$ 138.70	$ 145.27
Mar	151.8	$ 113.94	$ 115.36
Apr	100.1	$ 75.13	$ 68.52
Month	25% Above Average Use	Uniform Rate Of .75056	Company Proposal
Nov	60	$ 45.03	$ 34.79
Dec	145	$ 108.83	$ 109.20
Jan	220	$ 165.12	$ 177.17
Feb	210	$ 157.62	$ 168.10
Mar	172.5	$ 129.47	$ 134.12
Apr	113.75	$ 85.38	$ 80.89

As shown in Table 4, I also found that customers pay more in combined gas and non-gas cost when consumption falls below the average annual use.

Q. **IN YOUR OPINION AND BASED UPON YOUR STUDY, DO YOU BELIEVE THAT MGE'S PROPOSED RATE DESIGN IS DETRIMENTAL TO RESIDENTIAL CUSTOMERS?**

A. Yes, under MGE's proposed rate design I believe customers are made worse off for six reasons;

1. Based on the information contained in Table 4 and Table 5 it appears that consumers pay more in warmer weather and in the coldest winter months.

2. The potential gain or loss from weather variation is not symmetric if the Company is allowed to recover uncollected gas cost through the PGA/ ACA process. Consider balancing a winter with 10% higher use against one with 10% lower use. As shown in Table 4, assuming a 10% increase and 10% decrease are equally likely, the expected net affect would be that the customer would pays $12 more per year. ($12= ($25.35-$1.47)/2)
3. MGE's proposal virtually eliminates a customer's ability to reduce the non-gas portion of the bill through reduced consumption during the coldest months of the year. MGE's proposal shifts non-gas recovery to consumption at or below 68 Ccf. Based on average usage, customers would have to reduce usage in December through April by 25% to 60% depending on the month before reducing consumption to a level that could reduce non-gas cost charges on the bill.
4. MGE's proposed increase in the mandatory customer charge serves as an additional obstacle to a customer's ability to lower their monthly bill.
5. Weather variation is a primary factor related to risk for local gas distribution companies. By significantly reducing the weather sensitivity of the non-gas portion of customer's bills, MGE is able to significantly reduce the weather sensitivity of the revenues that it collects from customers for the non-gas portion of their bill. By mitigating the impact that weather has on the revenues that MGE receives from customers, the Company is able to reduce the impact that weather variations have on earnings. Unless the reduction in weather risk is accounted for through an

offsetting reduction in the Company's rate of return, customers are once again made worse off.

6. MGE's proposed rate design increases upward volatility of customers' utility bills in a colder than normal winter.

Q. **PLEASE DISCUSS THE PGA/ACA IMPACTS TO RESIDENTIAL CUSTOMERS.**

A. While there may be some savings due to the cap on recovery of non-gas cost at 68 Ccf, the Company's proposed modification to the PGA rates could significantly increase upward bill volatility in abnormally cold weather. MGE's rate design proposal changes the structure of PGA rates by creating two blocks instead of the uniform rate that is currently applicable to all levels of consumption. Instead of the uniform rate of $.75056, there would be two PGA rates, one that applies to consumption of the first 68 Ccf and another that applies to consumption in excess of 68 Ccf. MGE's proposal would decrease the initial block PGA rate from the current unblocked rate of $.75056 to $.57982 and establishes a second block rate at $.90617 which is significantly higher than the current uniform rate. Under the Company's proposal, during abnormally cold weather, additional gas usage would be charged at a rate that is approximately 21% higher than under the current PGA rate structure. (21%= ([$.90617-$.75056)/$.75056]*100) While the difference might be credited to customers at a later time through the ACA true-up process, it unnecessarily and in my opinion unreasonably magnifies the risk faced by customers during colder than normal weather. This magnification occurs because in five of the six winter months consumption for most residential customers exceeds 68 Ccf under normal weather so increases or decreases in consumption

due to abnormal weather occur in the second block for most customers. As the rate for consumption in the second block increases, so does the impact on the PGA portion of customer bills.

Q. **SINCE MGE'S RATE DESIGN MAY RESULT IN ANNUAL OVER OR UNDER COLLECTION OF GAS COST, COULD IT HAVE A HARMFUL IMPACT ON CUSTOMERS?**

A. Yes. Consider the example where a warmer than normal winter is followed by a colder than normal winter. As shown in Table 4, during a warmer than normal winter, the Company is likely to under-collect the amount of revenues needed to cover gas costs. If the under-recovery occurs in the middle or towards the end of the heating season, most of the under-recovery will probably need to be addressed in the ACA process and this will have an impact on the PGA rates in the subsequent heating season. If the warmer than normal heating season is then followed by a colder than normal heating season, the under-recovery in the first year will likely cause PGA rates to be higher in the second year than they would be under the current PGA rate structure. These higher PGA rates will be imposed on customers at the same time that customers are facing higher bills due to the increased volumes of usage in the colder than normal winter.

IV. CONNECTION AND RECONNECTION FEES

Q. **PLEASE DESCRIBE THE COMPANY'S PROPOSED CONNECTION AND RECONNECTION CHARGE LEVELS.**

A. The Company proposes to increase the connection fee from $20 to $45 and to increase the standard reconnection fee from $35 to $45. The Staff agrees with the proposed increases.

Q. **DO YOU AGREE WITH THE COMPANY AND STAFF PROPOSAL TO INCREASE RECONNECT AND CONNECTION FEES?**

A. No. I have a number of concerns regarding the proposed increases.

Q. **PLEASE EXPLAIN YOUR CONCERNS.**

A. A primary concern with the proposed increases is the magnitude of the proposed changes. With respect to the connection charge, the Company seeks an increase of 125% of the current rate. The Company's proposed rate for reconnection would increase by 26%.

Q. **ARE THERE BENEFITS TO KEEPING THE CONNECTION FEE AT A MORE AFFORDABLE LEVEL THAN THE RATE PROPOSED BY THE COMPANY?**

A. Yes. I believe there are significant benefits to maintaining a more affordable connection charge. The connection charge facilitates new customers using the system potentially for many years into the future. This in turn produces an ongoing revenue stream for the Company and potentially offsets fixed system costs that might have otherwise been recovered from fewer customers. While a lower connection charge seems an obvious benefit to the new customer in terms of the dollar savings, I would like the Commission to also consider another factor in weighing the benefit to a newly subscribing customer. If a customer is moving into a home or apartment it is likely that the customer may be facing connection charges and potentially up-front deposit requirements for other utility services

such as electric service and telephone service. For low and moderate income customers the initial cost to starting up multiple services may pose at best a hardship and at worst an insurmountable barrier to establishing independent residency. Customers most likely to be adversely affected by higher connection fees are single parent households, young couples without an established credit history, widowed individuals living on fixed incomes and low-income disabled consumers. It is interesting to note that the Federal Communications Commission (FCC) after considering the affordability to low-income consumers and system benefits associated with increased subscription authorized federal funding of a 50% discount of up to $30 toward service connection fees for basic local telephone subscription for low-income consumers.[1]

Q. **ARE THERE SIMILAR BENEFITS TO KEEPING THE RECONNECTION FEE AT MORE AFFORDABLE LEVELS THAN THE RATE PROPOSED BY THE COMPANY?**

A. Yes. Many of the same consumer groups financially vulnerable to increased connection fees are also financially vulnerable to increased reconnection fees. In addition, where the reconnection fee at the proposed level may pose an insurmountable obstacle for a customer to reinstate service, I find it reasonable to assume the Company would face an increased risk of writing off uncollected bill accounts. Ultimately, this write off would flow through to the remaining customer base.

[1] This program is known as the Federal Link Up Program.

I do not oppose the current structure that sets reconnection charges at a higher level than the connection fee because it is reasonable to provide some disincentive for failing to make timely payments.

Given that the Company through the ratemaking process is allowed the opportunity earn a normal rate of return, I see no compelling reason to allow targeted recovery through increased connection fees that may pose a significant detriment to financially vulnerable customers.

Q. **IF THE CONNECTION AND RECONNECTION CHARGES ARE MAINTAINED AT THE EXISTING LEVEL WILL IT RESULT IN AN UNREASONABLE RECOVERY OF COST FROM EXISTING CUSTOMERS?**

A. I do not believe it will. As I have testified to in many telephone proceedings, customers of one service are only considered to be providing a subsidy if the price of their service is priced above "stand alone cost" while the price of the other service is priced below "incremental cost." Stand-alone cost measures the cost of providing a good or service in isolation. It represents the maximum level of cost a firm would incur to produce a product absent any of the benefits from cost savings associated with using shared inputs to produce multiple products or services. Incremental cost measures only the additional cost incurred to add a good or service to a firm's existing production. Incremental cost excludes any allocation of the joint or common costs associated with the shared facilities or expenses needed to provide the firm's other services. Economic theory suggests that from the perspective of a multi-service firm, producing an additional service that can be successfully priced above incremental costs is generally beneficial

because it allows an additional opportunity to recover some portion of any joint and common costs without imposing any additional burden for cost recovery on the firm's other services. Therefore, unless the connection charge can be shown to be priced below incremental cost, there is little support for the notion that existing customers are made significantly worse off by retaining a lower connection charge for new customers.

Q. **HAVE YOU REVIEWED THE COMPANY'S WORK PAPERS THAT UNDERLIE MGE'S REQUEST FOR A HIGHER CONNECTION AND RECONNECTION FEES?**

A. Yes, I have.

Q. **IN YOUR OPINION, DOES IT SUPPORT HIGHER CONNECTION AND RECONNECTION CHARGES?**

A. A. No, it does not. Ignoring for a moment the potential public policy considerations that favor keeping connection and reconnection charges at more affordable levels, the cost study performed by the Company in support of increased rates does not demonstrate the existence of subsidy at the existing rates. Many of the cost elements such as labor, facility costs, taxes and other overhead cost can be characterized as joint and common cost. The Company's cost study provides no assurance that many of the costs could be avoided if connection and reconnection services were not assumed performed on a per job basis.

Additionally, I find some of the cost allocations to be questionable in terms of targeting recovery connection and reconnection services on a job specific basis to only a subset of the customer population. For example, the Company's study blends three measures of the time required to perform a connection and

reconnection. If the goal were to more specifically charge each customer the actual cost of connecting his or her service, then it would make sense to use the time estimate most consistent with the type of work performed on behalf of each customer. This might require developing an incremental charge specific to lengthier types of connections.

The second concern I have with the study is that a gross up factor associated with nonproductive time is applied to the hours associated with connections and reconnections. As Mr. Imhoff's testimony points out, such cost are not incurred on a per-job basis and are not reasonably recovered in that manner.

My third concern is that the Company's study includes the cost of missed appointments. Approximately 20% of missed appointments were attributable to the Company. If these cost are to be recovered, I believe it would be perfectly reasonable to recover them as "a cost of doing business" from the entire customer base instead of directly from connecting and reconnecting customers. Missed appointment cost caused by customers seems to me to be a reasonable cost to recover. However, I find it unreasonable to target connecting or reconnecting customers that kept scheduled appointments for full recovery for missed appointments by other connecting or reconnecting customers.

For the reasons stated above together with the results of Public Counsel's class cost of service study that recommend no increase to the residential class, I continue to recommend that reconnection charges remain at current levels.

V. RESPONSE TO THE STAFF LOW-INCOME PROPOSAL

Q. **PLEASE DESCRIBE THE STAFF'S LOW-INCOME PROPOSAL.**

A. The Staff recommends continuation of the Experimental Low Income Program in the Joplin area. Staff witness Anne Ross recommends:

1. Expanding the program to include households reaching 125% of the federal poverty level;
2. Increasing the monthly bill credit from $40 to $50 per month for households at or below 50% of the federal poverty level;
3. Eliminating the requirement for participants to accept a levelized payment plan;
4. Making weatherization a requirement for program eligibility;
5. Extending eligibility beyond 24 months;
6. Waiving late payment fees and past due charges;
7. Capping arrearage repayment at $30 per month;
8. Requiring MGE to write off and not recover on a going forward basis up to $200 per participant per six-month period;
9. Allowing multiple occurrences of late or partial payments during participation in the program;
10. Increasing outreach efforts.

Q. **DO YOU SUPPORT THESE RECOMMENDATIONS?**

A. To the extent that funding is available, I would support in total or in concept a number of the modifications the Staff proposes as follows:

1. Expanding the program to include households reaching 125% of the federal poverty level.

   To the extent funding is available I would support this recommendation. I will discuss the funding issue later in my testimony.

2. Increasing the monthly bill credit from $40 to $50 per month for households at or below 50% of the federal poverty level.

   I support the concept of increasing the bill credit received by participants. I have recommended a structure with four levels of bill credits in order to better target an appropriate amount of support to customers at differing incomes relative to the poverty level.

3. Eliminating the requirement for participants to accept a levelized payment plan.

   I would not oppose this recommendation. The intent of requiring customers to accept levelized billing was to make winter bills more manageable. I am aware that levelized billing and its interaction with receiving other forms of assistance may pose an obstacle to program participation so I believe there may be merit in evaluating the impact of suspending the requirement. With the elimination of the levelized billing requirement I agree that bill credits would be most effective if provided in the winter months.

4. Making weatherization a requirement for program eligibility;

I would support this recommendation only to the extent that funding is available and with the condition that customers who were successful in the previous program would be assured weatherization funding so that they might continue in the program. And, the condition that assurance of funding for program participants will not disrupt eligibility for weatherization for customers that might be on a current waiting list for weatherization through the DNR program.

5. Extending eligibility beyond 24 months.

I support this recommendation.

6. Waiving late payment fees and past due charges.

I would support waiving fees associated with arreages a customer may have incurred before entering the program. If bill credit levels are set appropriately, I believe it diminishes the need to waive late payment fees on a going forward basis. To the extent that waivers for future late payments are not supported from program or other residential ratepayer funds, I would not oppose such a waiver.

7. Capping mandatory arrearage repayment at $30 per month.

I support this recommendation.

8. Requiring MGE to write off and not recover on a going forward basis up to $200 per participant per six-month period.

To the extent that the Staff can demonstrate that the program is likely to generate equivalent savings to the company or increase revenues to offset the required non-recovered write-off, I would support this

recommendation. If no such showing can be made then I would not be able to support this recommendation unless the Company agrees.

9. Allowing multiple occurrences of late or partial payments during participation in the program.

I cannot support this recommendation to the extent the Staff has proposed. The primary goal of the program should be to promote timely payment habits. If bill credits are established at appropriate levels and arrearage repayment requirements are sufficiently manageable to make utility service affordable to low-income customers then I believe that generally it is reasonable to require timely payment as a condition of continued participation in the program. I would not object to a single permitted late payment per year. Or, could support a waiver for exceptional circumstances.

10. Increasing outreach efforts.

I would generally support efforts to increase outreach the recommendation to increase outreach

Q. **ARE THERE ADDITIONAL STAFF RECOMMENDATIONS THAT YOU WOULD LIKE TO ADDRESS?**

A. Yes. The Staff appears to recommend that weatherization funding be provided for through program funds for the Joplin area. I have recommended in my direct testimony that the program be expanded to include the St. Joseph area. In the event that like participation levels and program benefits can be offered to MGE customers in the St. Joseph area, then I would not oppose any excess funding

being used equally for weatherizing the homes of program participants in both areas. To date, the Staff has not indicated support for expanding the program to the St. Joseph area. Therefore, I assume based on Staff's testimony that there would likely not be enough money from program funds to support both funding for the Staff's proposed mandatory weatherization recommendation and for my recommendation to expand the program offering to customers in the St. Joseph area. If this is the case and only one option can be supported at the most recent funding level, then I believe weatherization should not be adopted as a mandatory requirement for program participation. This should certainly not be interpreted as a lack of support for weatherization. I have actually recommended a 15% increase in the current level of funding for system-wide funding. In addition, I recommended that the Commission move forward toward implementing a pay-as-you-save™ program in MGE's Kansas City service area.

If a choice must be made between adding mandatory weatherization and expanding the program to the St. Joseph area, then I believe that expanding the program to St. Joseph is the better choice for a number of reasons. First, my recommendation for the Joplin area was designed to on average make existing bill affordable based on a 4% natural gas burden so although weatherization would certainly help to make bills even more affordable I do not believe it is critical for success of the program. Secondly, there is weatherization funding in place for low-income customers in the Joplin area through the system-wide funding I have already proposed to increase. I believe that existing weatherization coupled with a low-income bill credits should be expected to improve the overall ability to pay in

the Joplin area. The third reason I would make the choice of expanding the program to St. Joseph is one of equity. St. Joseph residential customers including low-income customer contributed to the previous experimental program while receiving nothing in return. It seems reasonable to share the benefits for the next two years of the experimental program. The fourth reason I support expanding the program to St. Joseph if a choice must be made is simply that heating bills are higher in St. Joseph than in Joplin. Low-income customers in St. Joseph face larger heating bills and I believe expanding the program would offer some relief at least to the customers that participate. Finally, expanding the program to St. Joseph will allow for comparisons of the programs success under the differing weather condition between Northern and Southern Missouri.

VI. RESPONSE TO THE STAFF'S RATE DESIGN PROPOSAL

Q. **AS OF THE DATE OF HIS DIRECT TESTIMONY, STAFF WITNESS DAN BECK DOES NOT RECOMMEND INTER-CLASS SHIFTS. DO YOU AGREE WITH HIS RECOMMENDATION?**

A. Based on the results of Public Counsel's cost study filed by Jim Busch in his direct testimony, residential customers are paying significantly more than their cost of service. In my direct testimony, I recommended that that the residential class recover the same amount on a going forward basis. My recommendation was based on two factors. The first was that Public Counsel's cost study results indicated that the residential class was collecting substantially more than its cost of service. The second factor was that by maintaining residential class revenues at current levels some relief could be provided to other classes without making the

residential class worse off than before. Unless substantial adjustments are made to the underlying accounting data, I would continue to support my initial recommendation.

Q. **DO YOU NEED TO UPDATE ANY OF THE INFORMATION SUBMITTED IN YOUR DIRECT TESTIMONY?**

A. Yes, I need to update Schedule BAM DIR-2 to reflect corrections in the final table.

Q. **DO THE CHANGES SUBSTANTIALLY ALTER YOUR PREVIOUS CONCLUSIONS OR RECOMMENDATIONS?**

A. No, they do not.

Q. **DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

A. Yes it does.

COMPANY	1998	1999	2000	2001	2002	Mean	Std. Dev.	Coefficient of Variation
AGL RESOURCES, INC.	7.6%	5.7%	7.4%	6.5%	8.1%	7.1%	0.96%	13.53%
ATMOS ENERGY CORP	9.0%	5.1%	6.5%	5.9%	6.8%	6.7%	1.46%	21.93%
CASCADE NATURAL GAS	6.1%	7.5%	8.1%	8.5%	6.4%	7.3%	1.04%	14.28%
KEYSPAN CORP	NMF	7.1%	5.3%	**4.5%**	6.2%	5.8%	1.12%	19.46%
LACLEDE GAS COMPANY	8.1%	7.1%	6.7%	6.9%	6.0%	7.0%	0.76%	10.92%
NEW JERSEY RESOURCES	8.1%	9.0%	9.0%	8.5%	8.7%	8.7%	0.38%	4.37%
NICOR INC	**9.9%**	**10.9%**	**13.7%**	**12.3%**	**13.0%**	12.0%	1.55%	12.95%
NORTHWEST NATURAL GAS	**5.0%**	6.8%	6.7%	6.9%	5.9%	6.3%	0.81%	12.91%
NUI CORP	5.6%	6.1%	6.7%	5.6%	**2.8%**	5.4%	1.50%	28.00%
PEOPLES ENERGY CORP	7.8%	8.0%	9.5%	9.3%	8.4%	8.6%	0.76%	8.89%
PIEDMONT NATURAL GAS	9.2%	8.1%	8.3%	7.9%	7.8%	8.3%	0.56%	6.77%
SOUTH JERSEY INDUSTRIES	5.3%	7.4%	7.4%	6.9%	7.6%	6.9%	0.94%	13.61%
SOUTHWEST GAS CORP	5.8%	**4.8%**	**4.6%**	5.1%	4.5%	5.0%	0.52%	10.53%
UGI CORP	6.3%	6.7%	6.4%	7.1%	8.2%	6.9%	0.77%	11.10%
WGL HOLDINGS INC	8.0%	7.1%	7.9%	7.9%	5.3%	7.2%	1.14%	15.80%
	7.27%	7.16%	7.61%	7.32%	7.05%			

Please notice that the actual range of values produced by calculating each company's individual mean, standard deviation and coefficient of variation. Mr. Dunn's construction of averaged measures suppresses the actual variation that exist for the proxy group.

MGE's mean, standard deviation and coefficient of variation are within the ranges exhibited by the proxy group.

MR. Dunn first averages the columns to obtain a column mean. This process dilutes the natural variation existing in the proxy group. 7.27% 7.16% 7.61% 7.32% 7.05%

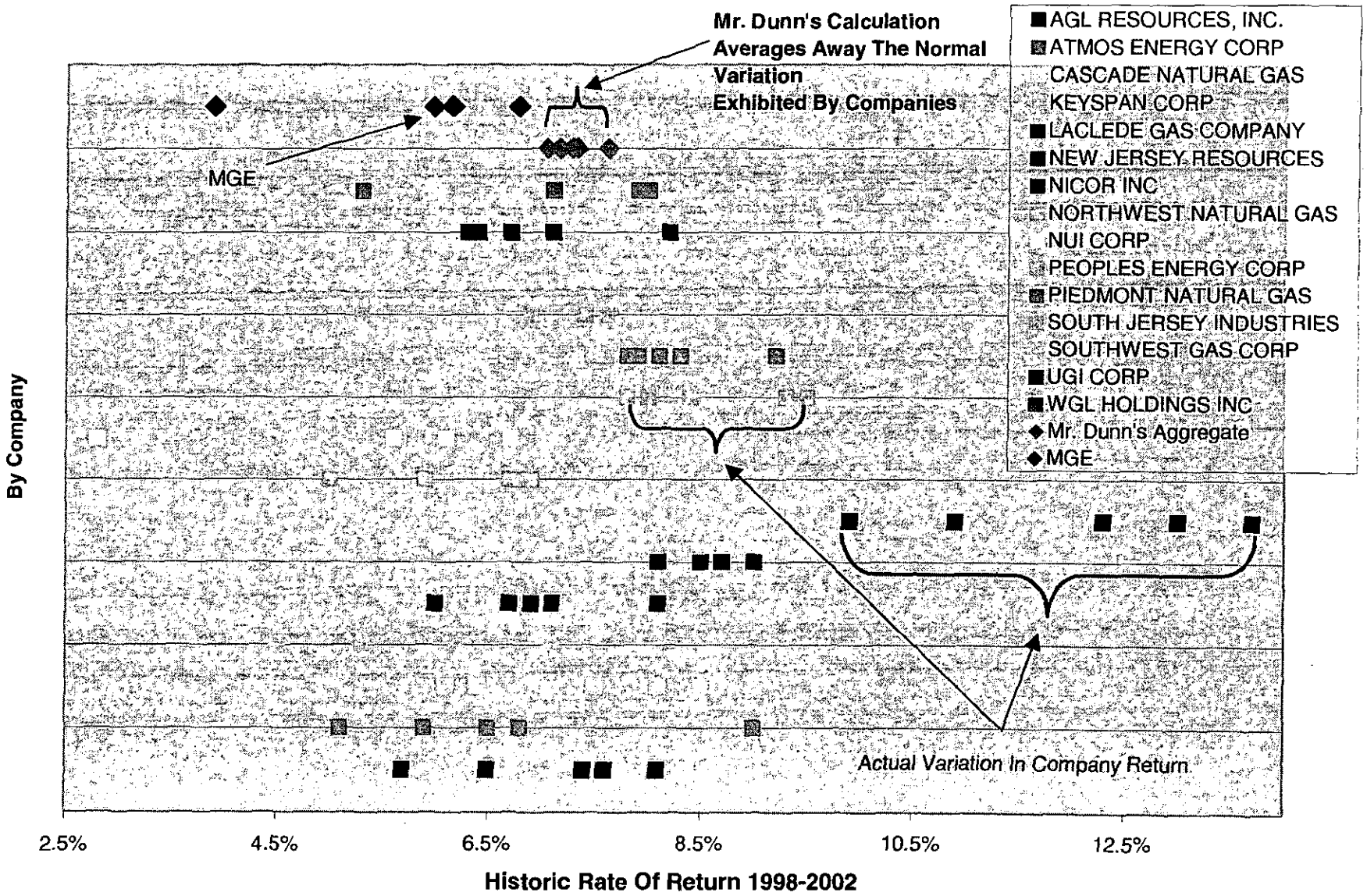
Mr. Dunn then averages the averages further diluting the natural variation. 7.28%

The standard deviation is an non-scaled measure of disbursement about the mean. 0.00213 or 0.21%

Mr. Dunn calculates a coefficient of variation as the standard deviation divided by the mean.The coefficient of variation is intended to provide a scaled measure of dispursion relative to the size of the mean. 2.88%

Mr. Dunn compares the coefficient of variation with one calculated for MGE

Mr.Dunn's reported MGE returns	5.97%	6.77%	6.14%	3.90%	6.15%
Mean	5.79%				
Standard deviation	1.10%				
Coefficient of variation	18.97%				


Mr. Dunn's Calculation Averages Away The Normal Variation Exhibited By Companies
MGE
AGL RESOURCES, INC.
ATMOS ENERGY CORP
CASCADE NATURAL GAS
KEYSPAN CORP
LACLEDE GAS COMPANY
NEW JERSEY RESOURCES
NICOR INC
NORTHWEST NATURAL GAS
NUI CORP
PEOPLES ENERGY CORP
PIEDMONT NATURAL GAS
SOUTH JERSEY INDUSTRIES
SOUTHWEST GAS CORP
UGI CORP
WGL HOLDINGS INC
Mr. Dunn's Aggregate
MGE
By Company
Actual Variation In Company Return
2.5%
4.5%
6.5%
8.5%
10.5%
12.5%
Historic Rate Of Return 1998-2002

Schedule 2

AGL RESOURCES, INC.	0.0760	**0.0570**	0.0740	0.0650	0.0810
	0.0050	0.0050	0.0050	0.0050	0.0050
ATMOS ENERGY CORP	0.0900	**0.0510**	0.0650	0.0590	0.0680
	0.0100	0.0100	0.0100	0.0100	0.0100
CASCADE NATURAL GAS	0.0610	0.0750	0.0810	0.0850	0.0640
	0.0150	0.0150	0.0150	0.0150	0.0150
KEYSPAN CORP	0.0710	**0.0530**	0.0450	0.0620	
	0.0200	0.0200	0.0200	0.0200	
LACLEDE GAS COMPANY	0.0810	0.0710	0.0670	0.0690	**0.0600**
	0.0250	0.0250	0.0250	0.0250	0.0250
NEW JERSEY RESOURCES	0.0810	0.0900	0.0900	0.0850	0.0870
	0.0300	0.0300	0.0300	0.0300	0.0300
NICOR INC	0.0990	0.1090	0.1370	0.1230	0.1300
	0.0350	0.0350	0.0350	0.0350	0.0350
NORTHWEST NATURAL GAS	**0.0500**	0.0680	0.0670	0.0690	**0.0590**
	0.0400	**0.0400**	**0.0400**	**0.0400**	**0.0400**
NUI CORP	**0.0560**	**0.0610**	0.0670	0.0560	**0.0280**
	0.0450	**0.0450**	**0.0450**	**0.0450**	**0.0450**
PEOPLES ENERGY CORP	0.0780	0.0800	0.0950	0.0930	0.0840
	0.0500	0.0500	0.0500	0.0500	0.0500
PIEDMONT NATURAL GAS	0.0920	0.0810	0.0830	0.0790	0.0780
	0.0550	0.0550	0.0550	0.0550	0.0550
SOUTH JERSEY INDUSTRIES	**0.0530**	0.0740	0.0740	0.0690	0.0760
	0.0600	**0.0600**	**0.0600**	**0.0600**	**0.0600**
SOUTHWEST GAS CORP	**0.0580**	**0.0480**	**0.0460**	0.0510	**0.0450**
	0.0650	**0.0650**	**0.0650**	**0.0650**	**0.0650**
UGI CORP	0.0630	**0.0670**	0.0640	0.0710	0.0820
	0.0700	0.0700	0.0700	0.0700	0.0700
WGL HOLDINGS INC	0.0800	0.0710	0.0790	0.0790	**0.0530**
	0.0750	0.0750	0.0750	0.0750	0.0750
MGE	***5.97%***	***6.77%***	***6.14%***	***3.9%***	***6.15%***
	0.0850	0.0850	0.0850	0.0850	0.0850
Mr. Dunn's Aggregate	7.27%	7.16%	7.61%	7.32%	7.05%
	0.0800	0.0800	0.0800	0.0800	0.0800

Barb Meisenheimer
GR-2004-0209

Poverty Level by Household Size(2004)

Poverty Level Range	Household Size 1	2	3	4	5	6
25%	$2,328	$3,123	$3,918	$4,713	$5,508	$6,303
50%	$4,655	$6,245	$7,835	$9,425	$11,015	$12,605
75%	$6,983	$9,368	$11,753	$14,138	$16,523	$18,908
100%	$9,310	$12,490	$15,670	$18,850	$22,030	$25,210
125%	$11,638	$15,613	$19,588	$23,563	$27,538	$31,513
150%	$13,965	$18,735	$23,505	$28,275	$33,045	$37,815
200%	$23,275	$31,225	$39,175	$47,125	$55,075	$63,025

SOURCE:100% Federal Poverty Level: 69 Federal Register 7335-7338 (February 13, 2004).

Natural Gas Burden at 4% Based On Poverty Level by Household Size (2004)

Poverty Level Range	Household Size 1	2	3	4	5	6
25%	$93	$125	$157	$189	$220	$252
50%	$186	$250	$313	$377	$441	$504
75%	$279	$375	$470	$566	$661	$756
100%	$372	$500	$627	$754	$881	$1,008
125%	$466	$625	$784	$943	$1,102	$1,261
150%	$559	$749	$940	$1,131	$1,322	$1,513
200%	$931	$1,249	$1,567	$1,885	$2,203	$2,521

			% Of Total
Winter Use (1)		499	76%
PGA Rate		0.75056	
Commodity Rate		0.11423	
Customer Charge	$	10.05	
Estimated Winter Season Bills	$	482.13	
Average Bill	$	96.43	

(1) Estimated

5 Month Natural Gas Burden at 4% Based On Poverty Level by Household Size

Poverty Level Range	Household Size 1	2	3	4	5	6
25%	$71	$95	$119	$143	$167	$191
50%	$141	$189	$237	$286	$334	$382
75%	$212	$284	$356	$428	$501	$573
100%	$282	$378	$475	$571	$667	$764
125%	$353	$473	$593	$714	$834	$955
150%	$423	$568	$712	$857	$1,001	$1,146
200%	$705	$946	$1,187	$1,428	$1,669	$1,910

Estimated Average Bill Based On Household Size (2003)

Poverty Level Range	Household Size 1	2	3	4	5	6
25%	$409.81	$433.91	$482.13	$482.13	$530.34	$554.45
50%	$409.81	$433.91	$482.13	$482.13	$530.34	$554.45
75%	$409.81	$433.91	$482.13	$482.13	$530.34	$554.45
100%	$409.81	$433.91	$482.13	$482.13	$530.34	$554.45
125%	$409.81	$433.91	$482.13	$482.13	$530.34	$554.45
150%	$409.81	$433.91	$482.13	$482.13	$530.34	$554.45
200%	$409.81	$433.91	$482.13	$482.13	$530.34	$554.45

Ability To Reach Natural Gas Burden Without Support

Poverty Level Range	Household Size 1	2	3	4	5	6
25%	($339.29)	($339.31)	($363.44)	($339.35)	($363.48)	($363.49)
50%	($268.77)	($244.71)	($244.75)	($196.57)	($196.61)	($172.54)
75%	($198.25)	($150.10)	($126.05)	($53.80)	($29.75)	$18.41
100%	($127.74)	($55.50)	($7.36)	$88.98	$137.12	$209.36
125%	($57.22)	$39.11	$111.33	$231.76	$303.98	$400.31
150%	$13.30	$133.71	$230.02	$374.54	$470.84	$591.26
200%	$295.37	$512.13	$704.78	$945.64	$1,138.30	$1,355.06

4% Burden + any $s Support Less Estimated Bill

Poverty Level Range	Household Size 1	2	3	4	5	6
25%	$60.71	$60.69	$36.56	$60.65	$36.52	$36.51
50%	$56.23	$80.29	$80.25	$128.43	$128.39	$152.46
75%	$51.75	$99.90	$123.95	$196.20	$220.25	$268.41
100%	($2.74)	$69.50	$117.64	$213.98	$262.12	$334.36
125%	($57.22)	$39.11	$111.33	$231.76	$303.98	$400.31
150%	$13.30	$133.71	$230.02	$374.54	$470.84	$591.26
200%	$295.37	$512.13	$704.78	$945.64	$1,138.30	$1,355.06

where $80 discount per month for 0% - 25% Poverty
$65 discount per month for26% - 50% Poverty
$50 discount per month for 51% - 75% Poverty
$25 discount per month for 76% -100% Poverty