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Witness: F. Jay Cummings
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MISSOURI PUBLIC SERVICE COMMISSION

MISSOURI GAS ENERGY

CASE NO. GR-2004-0209

SURREBUTTAL TESTIMONY OF

F. JAY CUMMINGS

ON BEHALF OF MISSOURI GAS ENERGY

Jefferson City, Missouri

June 2004

SURREBUTTAL TESTIMONY OF F. JAY CUMMINGS

CASE NO. GR-2004-0209

JUNE 2004

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1 **SURREBUTTAL TESTIMONY OF F. JAY CUMMINGS**

2 **CASE NO. GR-2004-0209**

3 **JUNE 2004**

4
5 **1. INTRODUCTION AND SUMMARY**

6
7 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

8 A. My name is F. Jay Cummings. My business address is 11044 Research Boulevard, Suite
9 A-325, Austin, Texas 78759.

10
11 **Q. ARE YOU THE SAME F. JAY CUMMINGS WHO FILED DIRECT TESTIMONY**
12 **IN THIS PROCEEDING ON NOVEMBER 4, 2003, UPATED DIRECT**
13 **TESTIMONY ON JANUARY 30, 2004, AND REBUTTAL TESTIMONY ON MAY**
14 **24, 2004?**

15 A. Yes.

16
17 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

18 A. The first sections of my surrebuttal testimony address revenue adjustment issues raised by
19 the parties in their rebuttal testimony. In Section 2, I discuss Staff's customer growth
20 adjustment. I conclude that Staff's proposed adjustment significantly overstates customer
21 growth in recent years and provide an alternative, more reasonable growth adjustment. In
22 Section 3, I address Staff's rebuttal testimony pertaining to the weather normalization
23 adjustment. I conclude that the support that I provided for the use of a 20-year period to

1 define normal weather in my rebuttal testimony remains valid and that Staff's proposed use
2 of the 1971-2000 period does not produce a reasonable measure of normal weather.
3

4 In Section 4, I discuss Staff's testimony on my load attrition adjustment. I show that none
5 of Staff's reasons for opposing the adjustment is valid and continue to recommend that the
6 Commission accept my proposed adjustment. In Section 5, I address the Office of Public
7 Counsel's ("OPC's") testimony pertaining to the proposed changes in miscellaneous
8 service charges. I address and refute each of OPC's reasons for opposing the proposed
9 increases in connect and reconnect charges and recommend that the Commission accept the
10 proposed service charges changes as agreed to by the Staff and the Company.
11

12 In Section 6, I address the issues raised by the parties pertaining to class cost of service
13 study results and class revenue allocation recommendations. My discussion highlights the
14 fact that since analysts reach quite different results in preparing cost of service studies, no
15 study should be considered anything more than a guide to the regulatory authority in
16 reaching its class revenue allocation decisions. I continue to support my original class
17 revenue allocation recommendation but reiterate my belief that proportionately allocating
18 the revenue increase to all customer classes based on current revenues would also be
19 reasonable.
20

21 In Section 7, I discuss rate design issues raised by the parties. The focus of much of this
22 discussion centers on the proposed weather-mitigation rate design. While I refute each of
23 the criticisms that the parties raise regarding the proposed rate design, the important point

1 of this section is that the weather-mitigation rate design seeks to address significant and
2 real problems facing the Company. These significant and real problems, the existence of
3 which no party credibly denies, include the extreme volatility of the Company's revenue
4 stream due to the current rate design's heavy reliance on volumetric rates, the historical
5 inability of the Company to reach the Residential usage levels that have been used to
6 design rates, and the historical inability of the Company to achieve its authorized rate of
7 return. (See Direct Testimony of F. Jay Cummings, page 8, line 14 – page 9, line 5 and
8 Rebuttal Testimony of F. Jay Cummings, page 30, line 16 – page 31, line 9). In order to
9 provide the Commission with an alternative to the weather-mitigation rate design that seeks
10 to address these significant and real problems, I address the rate design rebuttal testimony
11 of the Staff and OPC by reiterating and explaining the alternative recommendation that I
12 provided in my rebuttal testimony to couple the current basic rate design with the
13 implementation of a Weather Normalization Clause on an experimental basis (Rebuttal
14 Testimony of F. Jay Cummings, page 34, line 1 – page 38, line 12). No party has credibly
15 denied the existence of these real and significant problems facing the Company, yet no
16 party – other than MGE – has offered any meaningful rate design changes to address them.
17 Simply pretending that the problems associated with the current rate design do not exist
18 will not make them go away.

1 **2. STAFF CUSTOMER GROWTH ADJUSTMENT**

2

3 **Q. PLEASE EXPLAIN THE PURPOSE OF STAFF'S CUSTOMER GROWTH**
4 **ADJUSTMENT DISCUSSED IN ITS REBUTTAL TETIMONY.**

5 A. As explained by Staff witness Harrison on page 2, line 9 – page 4, line 5, Staff's
6 adjustment is intended to annualize Residential, Small General Service ("SGS"), and Large
7 General Service ("LGS") revenue to account for customer growth through December 2003.
8 The approach relies on five-year averages and results in the following adjustments to
9 revenue for the test year ended June 30, 2003:

<u>Customer Class</u>	<u>Growth (indicates decrease)</u>
Residential	\$ 776,864
SGS	\$2,044,153
LGS	\$ (22,364)

14 The total adjustment of \$2,798,653 represents an addition of approximately 2% to
15 unadjusted test year margin from these customer classes.

16

17 **Q. DO YOU AGREE WITH STAFF'S GROWTH ADJUSTMENT?**

18 A. No. Staff's adjustment is simply not representative of customer growth patterns
19 experienced by the Company in the last couple of years. By using a long period of time as
20 the basis of its growth adjustment, Staff is combining three periods with three different
21 growth patterns - the late 1990s with its relatively steady and significant customer growth,
22 the latter part of 2001 with its negative growth after the gas cost spike in the winter 2000-
23 01, and the last couple of years with its more modest customer growth compared to the
24 1990s. These patterns were shown graphically for the Residential class in my Rebuttal
25 Schedule FJC-5. It would only be by accident that the combination of these three very

different periods would result in a growth adjustment that is representative of experience in recent years and is, thus, a reasonable expectation of ongoing changes in the total number of customers.

Q. CAN YOU SHOW WHY THE STAFF'S GROWTH ADJUSTMENT IS NOT REPRESENTATIVE OF THE MOST RECENT THREE YEARS OF EXPERIENCE?

A. Yes. The following table quantifies adjustments based on regular bill growth rates over the last one, two and three calendar years (based on Staff's normalized use per customer):

	<u>Actual Annualized Growth</u>			<u>Staff Proposal</u>
	<u>Last Year</u>	<u>Last Two Years</u>	<u>Last Three Years</u>	
Residential	\$ 367,768	\$ 464,597	\$ 328,746	\$ 776,864
SGS	\$ 812,900	\$ 900,507	\$ 575,243	\$ 2,044,153
LGS	<u>\$ (240,626)</u>	<u>\$ (176,651)</u>	<u>\$ (155,755)</u>	<u>\$ (22,364)</u>
Total	\$ 940,042	\$ 1,188,453	\$ 748,234	\$ 2,798,653

The column labeled "Last Year" for each class represents growth in calendar year 2003 (calculated by averaging the growth over each of the 12 months compared to the same month in 2002, i.e. an average of January 2003 versus January 2002 growth, February 2003 versus February 2002 growth, and so forth through December 2003 versus December 2002 growth). The "Last Two Years" represents average growth over calendar years 2002 and 2003, and the "Last Three Years" represents average growth over the 2001-03 period.

This table clearly shows that Staff's adjustment is wholly inconsistent with the most recent three years of historical growth data. Of the adjustments for the three customer classes, Staff's Residential adjustment bears the closest resemblance to reality, but it is still

1 considerably overstated. Staff's Residential adjustment implies a 0.80% annual growth
2 rate over test year ended June 30, 2003 average customer counts, a growth rate that has not
3 been achieved since November 2002 (versus November 2001). Since November 2002,
4 growth rates have ranged from 0.18% to 0.68% through December 2003. In the first four
5 months of 2004, Residential growth compared to corresponding months in the 2003 has
6 ranged from 0.05% to 0.32%.

7
8 By contrast to the considerably overstated Residential adjustment, Staff's SGS and LGS
9 adjustments are even further out of line with actual experience over the past three years.
10 Staff's SGS adjustment suggests a growth rate of 7.07% over test year ended June 30, 2003
11 average customer counts. In fact, SGS growth in calendar year 2003 ranged from 0.76% to
12 4.38%, with an average of 2.81%. Over the last two calendar years, average SGS customer
13 growth was 3.11%. In the first four months of 2004, SGS growth compared to
14 corresponding months in 2003 has ranged from 2.90% to 3.05%. A 7.07% SGS growth
15 rate is clearly unrepresentative of recent experience and is, therefore, unlikely to be
16 achieved. Staff's LGS adjustment suggests negative annual growth of 0.78%. In fact, the
17 Company has consistently experienced much larger negative LGS growth since October
18 2000. And this LGS trend continues with the first fourth months experience in 2004.

19
20 No matter which of the alternative measures of actual growth shown in the table above is
21 considered, Staff's adjustment is overstated in total by a least a factor of two. Including a
22 revenue adjustment of the size recommended by Staff in determining the Company's
23 revenue requirement would not provide the Company with any reasonable opportunity to

1 reach the revenue levels that would be used to set rates in this proceeding. Consequently,
2 the likelihood that the resulting rates would enable MGE to actually achieve its authorized
3 rate of return would be virtually nil.

4
5 **Q. WHY DO YOU BELIEVE THAT CUSTOMER GROWTH IN RECENT YEARS**
6 **HAS CHANGED COMPARED TO THE EXPERIENCE IN THE 1990S?**

7 **A.** Certainly a major contributor is the cost of gas. As shown in Rebuttal Schedule FJC-5, the
8 Company experienced steady and significant Residential growth in the Kansas City and
9 Joplin regions throughout the 1990s. After the gas cost spike in the winter of 2000-01, the
10 Company experienced a sharp decline in average bill counts in the latter part of 2001.
11 While positive growth returned in these areas in early 2002, the growth rates have been
12 much lower than the rates in the 1990s. I believe that the higher gas costs in this period
13 compared to the 1990s and rising gas costs since late 2002 are important contributors to the
14 more modest growth that the Company has experienced in recent years. The turndown in
15 general economic conditions in recent years compared to the last 1990s likely also has
16 impacted these growth rates.

17
18 **Q. HAVE YOU PREPARED A SUPPORTING SCHEDULE SHOWING THE**
19 **CALCULATION OF THE GROWTH ANNUALIZATION ADJUSTMENT**
20 **ALTERNATIVES SHOWN IN YOUR TABLE?**

21 **A.** Yes. Surrebuttal Schedule FJC-1, Surrebuttal Schedule FJC-2, and Surrebuttal Schedule
22 FJC-3 provide the volume and dollar adjustments by month and geographic region for the
23 Residential, SGS, and LGS classes for each of the growth adjustment alternatives. For

1 each class, these schedules show the adjustments based both on Staff's normal use per
2 customer, the top panel of each schedule, and my normal use per customer, the bottom
3 panel of each schedule.
4

5 **Q. WHICH CUSTOMER ANNUALIZATION ADJUSTMENT ALTERNATIVE DO**
6 **YOU RECOMMEND THAT THE COMMISSION ACCEPT IN DETERMINING**
7 **THE COMPANY'S REVENUE DEFICIENCY AND ASSOCIATED BILLING**
8 **DETERMINANTS?**

9 A. As discussed above, I recommend that the Commission reject Staff's growth annualization
10 adjustment. Similarly, I do not recommend that the Commission use the 3-year average
11 growth alternative because this alternative includes the period of negative growth
12 subsequent to the gas cost spike of the winter of 2000-01. Either growth in 2003 compared
13 to the prior year, i.e. "Last Year," or growth over the last two years, i.e. "Last Two Years,"
14 provides a reasonable basis for developing the growth annualization adjustment. To err on
15 the side of being conservative, i.e. limiting the size of the revenue deficiency, I recommend
16 that the two-year average growth rate alternative be accepted by the Commission. This
17 alternative results in an addition to test year margin of \$1,181,342 based on my normal
18 customer use, or \$1,188,453 based on Staff's normal customer use. This adjustment
19 replaces my \$277,098 growth annualization adjustment for the test year ended June 30,
20 2003. That adjustment annualized customer changes within the test year, while the
21 recommended adjustment annualizes margin for customer changes through December
22 2003, the end of the update period.
23

1 **Q. IF THE COMMISSION ADOPTS THE TRUE-UP AUDIT RECOMMENDED BY**
2 **THE STAFF AND MGE IN THIS CASE AND REQUIRES CUSTOMER GROWTH**
3 **TO BE UPDATED THROUGH APRIL 30, 2004, HOW SHOULD THE GROWTH**
4 **ADJUSTMENT IN THIS PERIOD BE CALCULATED?**

5 A. For each customer class, the average growth rate in the first four months of 2004 compared
6 to corresponding months in 2003 should be applied to average customer counts in January
7 through April 2003 to determine customer count changes from the test year. The following
8 volume and dollar adjustments would then be added to the customer growth adjustment
9 through 2003 explained above and shown in Surrebuttal Schedules FJC-1 through FJC-3:

	<u>Staff Normal Use</u>		<u>Company Normal Use</u>	
	<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>
<u>Residential</u>				
Jan	132,894	22,477	130,559	22,210
Feb	128,667	21,994	122,590	21,300
Mar	100,062	18,726	101,252	18,862
Apr	<u>67,536</u>	<u>15,011</u>	<u>67,181</u>	<u>14,970</u>
	429,160	\$ 78,208	421,583	\$ 77,343
<u>SGS</u>				
Jan	992,493	158,092	979,574	156,394
Feb	974,937	155,989	928,032	149,813
Mar	773,299	129,566	780,500	130,516
Apr	<u>517,138</u>	<u>71,209</u>	<u>519,056</u>	<u>71,370</u>
	3,257,867	\$ 514,856	3,207,162	\$ 508,093
<u>LGS</u>				
Jan	(317,588)	(38,541)	(345,328)	(41,653)
Feb	(330,158)	(39,951)	(314,994)	(38,250)
Mar	(287,206)	(35,132)	(266,041)	(32,758)
Apr	<u>(162,865)</u>	<u>(13,388)</u>	<u>(172,872)</u>	<u>(14,031)</u>
	(1,097,817)	\$(127,012)	(1,099,236)	\$(126,692)

1 **3. STAFF WEATHER NORMALIZATION ADJUSTMENT**

2

3 **Q. WHAT POSITIONS DID THE PARTIES EXPRESS ON YOUR WEATHER**
4 **NORMALIZATION ADJUSTMENT THROUGH THEIR REBUTTAL**
5 **TESTIMONY?**

6 A. The only witness to address the adjustment was Staff witness Patterson. Mr. Patterson
7 questions my use of a 20-year period to define normal weather and maintains that his 1971-
8 2000 measure is preferable.

9

10 **Q. HOW DOES STAFF WITNESS PATTERSON SUPPORT HIS CONCLUSION?**

11 A. Staff witness Patterson first indicates that my 20-year normal is inconsistent with the
12 Commission's decision in Case No. GR-96-285. The remainder of his support is based on
13 a "simulation model to evaluate the use of alternative time frames to calculate normal
14 annual HDDs" (Rebuttal Testimony of Dennis Patterson, page 3, lines 15-16).

15

16 **Q. IS YOUR 20-YEAR NORMAL INCONSISTENT WITH THE COMMISSION'S**
17 **DECISION IN CASE NO. GR-96-285?**

18 A. Yes, and I noted this difference in my rebuttal testimony (Rebuttal Testimony of F. Jay
19 Cummings, page 8, lines 9-12). But merely citing the Commission's decision begs the
20 question of whether the use of a 30-year period is a reasonably accurate measure of normal
21 weather in this proceeding. I have addressed this issue at length in my rebuttal testimony
22 (Rebuttal Testimony of F. Jay Cummings, page 9, line 1 – page 11, lines 19) and have
23 clearly established the appropriateness of the 20-year measure. I showed, for example, that

1 “the use of the 1971-2000 measure to define normality is not representative of typical
2 weather experience since the mid-1980s” (Rebuttal Testimony of F. Jay Cummings, page
3 11, lines 17-19). Furthermore, despite Mr. Patterson’s steadfast adherence to the use of a
4 30-year period, a number of other state regulatory commissions have chosen shorter
5 periods, including a 20-year period, to define normality.¹
6

7 **Q. HOW DOES STAFF WITNESS PATTERSON REACH A DIFFERENT**
8 **CONCLUSION FROM THE ONE THAT YOU REACH?**

9 A. Mr. Patterson relies on a simulation model for his support while I rely on actual historical
10 experience. Although Mr. Patterson’s model may be intellectually interesting, he reaches
11 certain meaningless conclusions and the model results do not appear to recognize the
12 importance of actual, historical patterns.
13

14 **Q. PLEASE PROVIDE AN EXAMPLE OF MEANINGLESS CONCLUSIONS DRAWN**
15 **FROM THE SIMULATION MODEL.**

16 A. Mr. Patterson argues that it is necessary to update the 20-year calculation of normal every
17 year “[b]ecause the average over only twenty years will usually be farther from the long-
18 term average than the average over thirty years” (Rebuttal Testimony of Dennis Patterson,
19 page 7, lines 19-20). While the statement is mathematically true, it has no meaning. Why
20 does the statement not argue for the use of a period even longer than 30 years so that the
21 average would have to be updated even less often? More importantly, any measure of
22 normality should be updated to reflect recent weather experience if it is to reflect ongoing
23 weather conditions.

¹ See, Rebuttal Testimony of F. Jay Cummings, page 7, line 17 – page 8, line 12 and associated footnotes.

1 **Q. PLEASE PROVIDE EXAMPLES OF HOW STAFF WITNESS PATTERSON’S**
2 **MODEL RESULTS DO NOT APPEAR TO RECOGNIZE THE IMPORTANCE OF**
3 **ACTUAL, HISTORICAL PATTERNS.**

4 **A.** Nowhere does Mr. Patterson explain how his model results take into account the historical
5 fact that his 30-year measure is impacted by the “cold weather during the 1970s and early
6 1980s that has not consistently repeated itself in the last 15 to 20 years” (Rebuttal
7 Testimony of F. Jay Cummings, page 10, lines 8-9). As shown in my rebuttal testimony,
8 average HDDs in Kansas City in the eight year span of 1978 through 1985 were met or
9 surpassed in only two of the next 18 years (Rebuttal Testimony of F. Jay Cummings, page
10 11, lines 14-16).

11
12 Other than a reference to global warming (Rebuttal Testimony of Dennis Patterson, page 5,
13 lines 8-24), not Missouri conditions, and the subsequent simulation of its effects, nowhere
14 does Mr. Patterson explain how his model results are consistent with the trends reflected in
15 my Schedule FJC-2. This schedule clearly shows that the number of HDDs in Kansas City
16 decline as the period for defining normality is shortened and that all alternative measures of
17 normality are reasonably close to one another, except the outlying 1971-2000 measure.
18 Not only does Mr. Patterson ignore the last three years with his choice of the 1971-2000
19 period to define normal weather, but his simulation model results do not appear to
20 recognize the importance of history, including cold weather history that has not repeated
21 itself with regularity.

1 **Q. ON PAGE 7, LINES 6 – 16, STAFF WITNESS PATTERSON QUANTIFIES THE**
2 **REVENUE CONSEQUENCES ASSOCIATED WITH THE USE OF 20-YEAR**
3 **VERSUS HIS 1971-2000 WEATHER. DO YOU AGREE WITH HIS**
4 **QUANTIFICATION?**

5 A. His \$1.0 million approximate quantification is reasonably close to the approximate \$800
6 thousand difference between my adjustment and the Staff adjustment for the test year
7 ended June 30, 2003. Based on his discussion that follows this quantification, Mr.
8 Patterson apparently believes that this difference represents “a significant burden on the
9 residential ratepayers” (Rebuttal Testimony of Dennis Patterson, page 8, lines 1-2). The
10 fact is that rates will be higher with a 20-year measure of normal, but unless this more
11 representative measure of normality is used to adjust revenues, the Company will have no
12 reasonable opportunity to actually achieve the revenue levels used to set rates in this
13 proceeding. Contrary to Mr. Patterson’s assertion, residential customers are not better off
14 if the Company must file more frequent rate cases because of continual earnings shortfalls
15 resulting from basing rates on unrealistically high revenue levels associated with an
16 unrepresentative measure of normal weather.

18 **4. LOAD ATTRITION ADJUSTMENT**

19
20 **Q. WHAT PARTIES ADDRESS YOUR LOAD ATTRITION ADJUSTMENT AND**
21 **WHAT POSITIONS DID THEY TAKE IN THEIR REBUTTAL TESTIMONY?**

22 A. Staff witnesses Beck and Oligschlaeger discuss and oppose my load attrition adjustment.

1 **Q. WHAT IS STAFF WITNESS OLIGSCHLAEGER'S BASIS FOR OPPOSING THE**
2 **LOAD ATTRITION ADJUSTMENT?**

3 A. In addition to referencing the testimony of Staff witness Beck, Staff witness Oligschlaeger
4 states that "the Staff also opposed the load attrition adjustment because, as proposed by
5 MGE, it is out-of- period and not properly matched with other elements of MGE's revenue
6 requirement" (Rebuttal Testimony of Mark L. Oligschlaeger, page 22, lines 6-8).

7
8 **Q. DO YOU AGREE WITH STAFF WITNESS OLIGSCHLAEGER?**

9 A. No. The concept of matching is not violated because the load losses materialize whether or
10 not any other component of MGE's revenue requirement changes, and these load losses are
11 not associated with or caused by any other component of the revenue requirement.
12 Violation of matching occurs when one element of the cost of service is adjusted but a
13 causally-linked second element is not adjusted. For example, recognizing plant additions
14 in rate base but not including the revenue associated with new customers served by the
15 plant would violate the matching concept. Or, recognizing wage increases but not the
16 associated employment taxes would violate the concept. In the case of the load attrition
17 adjustment, the volumes associated with customer counts as of the end of the test year are
18 adjusted downward to reflect the quantifiable downward trend in usage that will cause
19 these customers, not new customers, to use less gas by the time new rates become effective
20 in this proceeding. There is no cause-and-effect relationship between these load losses and
21 other components of the revenue requirement. If other factors cause MGE's revenue
22 requirement to increase or decrease between the end of the true-up period and the time

1 when new rates become effective, the same load attrition occurs regardless of the size or
2 direction of these factors. The attrition adjustment does not violate the matching concept.

3
4 **Q. DO YOU AGREE WITH STAFF WITNESS OLIGSCHLAEGER'S OTHER**
5 **REASON FOR OPPOSING THE LOAD ATTRITION ADJUSTMENT, I.E. THAT**
6 **IT IS AN OUT-OF-PERIOD ADJUSTMENT?**

7 A. No. Staff witness Oligschlaeger indicates that adjustments should not extend beyond the
8 end of the update period, i.e. end of December 2003, or, if the Commission orders a true-
9 up, through the end of this period, i.e. end of April 2004 (Rebuttal Testimony of Mark L.
10 Oligschlaeger, page 21, line 22 – page 22, line 3). He objects to the attrition adjustment
11 because it quantifies load losses through September 2004.

12
13 Cutting off adjustments at a date certain ensures that included adjustments are known and
14 measurable and do not violate the matching concept. However, the attrition adjustment
15 measured through September 2004 is known and measurable today, and its inclusion in the
16 development of the Company's revenue requirement does not violate the matching concept.
17 If, however, the Commission chooses to adopt an absolute cut-off for all adjustments at the
18 end of the true-up period, this choice does not suggest that the attrition adjustment should
19 be rejected. Rather, the measurement of the adjustment should end in April 2004, rather
20 than September 2004.

1 **Q. HAVE YOU PREPARED A SCHEDULE QUANTIFYING THE ATTRITION**
2 **ADJUSTMENT FOR THIS SHORTENED PERIOD?**

3 A. If the Commission orders a true-up and believes that the load attrition adjustment should be
4 cut off at the end of April 2004, Surrebuttal Schedule FJC-4 provides the required attrition
5 adjustment, volumes and dollars, by customer class and region. The total adjustment of
6 (\$1,117,914) would replace my adjustment of (\$1,629,718). In the event that the
7 Commission does not order a true-up and believes that the load attrition adjustment should
8 be cut off at the end of December 2003, the adjustment becomes (\$ 650,028). Surrebuttal
9 Schedule FJC-5 provides the details of the attrition adjustment through December 2003.

10
11 **Q. WHAT REASONS DOES STAFF WITNESS BECK OFFER IN OPPOSITION TO**
12 **THE ATTRITION ADJUSTMENT?**

13 A. Staff witness Beck lists six reasons why he opposes the load attrition adjustment (Rebuttal
14 Testimony of Daniel I Beck, page 1, line 24 – page 2, line 15). I will address each of these
15 reasons and explain why none of the reasons provides a basis for rejecting the adjustment.

16
17 **Q. PLEASE DISCUSS STAFF WITNESS BECK'S FIRST REASON FOR OPPOSING**
18 **THE ADJUSTMENT.**

19 A. Mr. Beck's first reason is that the "impact of any historical trend in customer usage is
20 already in the test year data and therefore is accounted for" (Rebuttal Testimony of Daniel
21 I. Beck, page 1, lines 24-25). This statement provides no basis for rejecting the adjustment.
22 The load attrition adjustment captures post-test year load losses (through September 2004)
23 experienced by test year customers. The load losses captured in the load attrition

1 adjustment could not possibly have been "accounted for" in the test year data because they
2 result from the continuation of the identified and quantified usage trend that does not
3 impact customer usage until after the end of the test year.

4
5 **Q. HOW DOES STAFF WITNESS BECK SUPPORT THIS CLAIM?**

6 A. Mr. Beck points to fact that the weather sensitivity shown in the load attrition analysis is
7 greater than the weather sensitivity shown in the test year data and concludes that:

8 The Load Attrition Adjustment is based on the concept that the Company is
9 losing base load usage while the temperature sensitive usage remains
10 constant. However, these results support the conclusion that weather
11 sensitivity is lower for the test year than the 9-year historical period.
12 Therefore, analysis based solely on the test year includes a lower weather
13 sensitive coefficient, reflects a more current estimate of base load usage
14 already and already accounts for any load attrition. (Rebuttal Testimony of
15 Daniel I. Beck, page 4, lines 3-8)

16 The premise of Mr. Beck's support contained in the first sentence of the quote above is
17 incorrect. Mr. Beck's belief that load attrition is associated only with base load usage leads
18 to incorrect conclusions later in his testimony that I explain below. The "support" in the
19 remainder of the quote in no way challenges the measurement or appropriateness of the
20 adjustment. This discussion focuses on test year usage, not known and measurable load
21 losses after the end of the test year (through September 2004).

22
23 **Q. WHY DO YOU STATE THAT HIS PREMISE IS INCORRECT?**

24 A. Load attrition is not just a base load phenomenon, but results from a combination of
25 declining base load usage and reduced sensitivity of usage to weather variations. Consider,
26 for example, the Residential class. Base load usage is declining due to factors such as
27 improved water heater and clothes dryer efficiencies, greater incidence of pilotless water

heaters and electronic-ignition stove tops, and increased installations of water heater wraps. It is also declining due to greater reliance on convenience foods and microwave ovens. Reduced weather sensitivity simply means that customers use less gas with any given temperature levels. Reduced weather sensitivity is due to factors such as increasing awareness of the value of conservation achieved through thermostat setbacks and insulation measures, improved efficiencies of furnaces, increased incidence of automatic thermostats, and improved thermal efficiencies in newer homes.

Q. DO THE RESULTS FROM YOUR LOAD ANALYSIS SUGGEST THAT BOTH DECLINING BASE LOAD AND REDUCED WEATHER SENSITIVITY ARE REFLECTED IN YOUR STATISTICAL RESULTS?

A. Yes. The trend variable captures both influences. The following table shows the historical trend in Kansas City Residential average July and August usage, i.e. a simple measure of approximate base load usage, and in November through March average usage per bill per HDD, i.e. an indication of the degree of weather sensitivity:

July - August Average Usage Per Bill		November - March Average Usage Per Bill Per HDD	
1994	23.88	1994-1995	0.18863
1995	23.90	1995-1996	0.18467
1996	23.07	1996-1997	0.18214
1997	22.38	1997-1998	0.18585
1998	20.42	1998-1999	0.16873
1999	20.27	1999-2000	0.16428
2000	19.52	2000-2001	0.15636
2001	18.56	2001-2002	0.15302
2002	17.91	2002-2003	0.16018
2003	17.80		

1 Clearly, the data suggest declining base load and decreasing weather sensitivity as time
2 passes. The negative trend variable in the statistical analyses captures both of these
3 influences.²

4
5 **Q. ON PAGE 6, LINE 23 – PAGE 7, LINE 2, STAFF WITNESS BECK INDICATES**
6 **THAT THE ADJUSTMENT IS NOT SUPPORTED BECAUSE YOU HAVE NOT**
7 **PROVIDED SPECIFIC INFORMATION ABOUT APPLIANCE EFFICIENCIES**
8 **AND SATURATIONS, HOUSING STOCKS, AND OTHER END-USE DATA. IS**
9 **THIS CRITICISM MEANINGFUL?**

10 A. No. While having no information concerning causes of the identified and quantified trend
11 would be problematic, it is not necessary to isolate and quantify each of the contributors to
12 the trend in order for an adjustment based on the trend to be included in the determination
13 of the Company's revenue deficiency.³ In fact, the declining trend and the possible causes
14 of the trend are well known. I mentioned a few of these causes above and cited an

² The fact that the trend variable captures both influences is further demonstrated by the fact that its value, i.e. negative 1.51 Ccf per year for Kansas City Residential, is a larger than the value of a "base load" trend variable determined through a statistical analysis of July and August Kansas City Residential usage. The following regression results for July-August show a negative 0.85 Ccf per year "base load" trend for Kansas City Residential:

$$\begin{array}{lcl} \text{Usage per Bill} = & 24.671 - 0.851 \text{ Trend} & R^2 = 0.96 \\ & (65.24) \quad (13.97) & \end{array}$$

Each of the coefficients in these July-August results is statistically significant at the 99% confidence level as indicated by the t-statistics shown in parentheses.

³ The notion of requiring knowledge of causation is not required in order for an adjustment to be considered known and measure. Suppose, for example, the U.S. Postal Service announces a postage rate increase that is to take effect shortly after the end of the test year. A regulatory authority will not reject a known and measurable adjustment associated with the change because the utility does not know the extent to which the increase is caused by higher wages, higher fuel costs, lower productivity, or some other factors. Establishing elements of causation is not required to satisfy a known and measurable standard.

1 American Gas Association study pertaining to the residential trend in my direct testimony.⁴
2 The declining trend is often cited in industry and government publications.⁵ It has also
3 been the topic of discussion at industry conferences.⁶ The simple fact is that declining
4 usage per customer due to a variety of causes is well documented. I have quantified the
5 impact of the combination of these causes through the trend factor with a high degree of
6 accuracy. Unless the load attrition adjustment is used in setting rates, the Company will
7 not have a reasonably opportunity to achieve the revenue level used to set rates in this
8 proceeding.

9
10 **Q. EARLIER IN YOUR TESTIMONY, YOU INDICATED THAT STAFF WITNESS**
11 **BECK'S BELIEF THAT LOAD ATTRITION IS ASSOCIATED ONLY WITH**
12 **BASE LOAD USAGE LEADS HIM TO OTHER INCORRECT CONCLUSIONS.**
13 **PLEASE EXPLAIN.**

14 **A.** On page 7, line 17 of his rebuttal testimony, Staff witness Beck calculates test year base
15 load usage for Kansas City Residential customers to be 6.57 Ccf based on his interpretation
16 of the load attrition results. He dismisses the attrition adjustment on this basis because the
17 test year model used for developing the weather normalization adjustment shows non-

⁴ Direct Testimony of F. Jay Cummings, page 13, lines 13-15. I agree with Staff witness Beck's observation that I should not have added together two numbers from the American Gas Association study in my direct testimony (Rebuttal Testimony of Daniel I. Beck, page 9, lines 3-4). However, my purpose in citing the study was merely illustrative. I did not use it in any way to quantify my attrition adjustment. As a result, my oversight has no impact on the results of my analyses or on the appropriateness of the adjustment.

⁵ See, for example, the American Gas Association follow-up study to the one I referenced in my direct testimony, "Patterns in Residential Natural Gas Consumption, 1997-2001" (June 16, 2003), and the per-household energy demand analysis performed by Energy Information Administration Analyst Stephanie J. Battles, "The Other Side of the Demand Equation: Sector Demand," United States Association for Energy Economics, *Dialogue*, Vol. 12, No. 1 (March 2004).

⁶ See, for example, presentations by NiSource ("Natural Gas Consumption Trends and Price Elasticity") and the Gas Technology Institute ("Declining Consumption Trends in the Residential Sector – Forecasting Implications") at the October 2002 Southern Gas Association's Forecasters Forum.

1 weather sensitive usage of 13.43 Ccf. However, his calculation of base load usage from the
2 attrition analysis is incorrect because it assumes that attrition is entirely base load driven.
3 If I assume, for example, that half of the attrition is base load-related, the calculated test
4 year base load would become 13.75 Ccf.⁷

5
6 On page 10, line 7 – page 11, line 10 of his rebuttal testimony, Staff witness Beck
7 questions my load attrition analysis results by calculating usage in August implied by his
8 interpretation of the load attrition analysis compared to actual data. Again, the problem
9 with Mr. Beck's calculations is that they assume that all load attrition is base load-related,
10 when it is not. The following table shows actual Residential usage per customer for all
11 regions, Mr. Beck's incorrectly calculated August usage and two alternatives that bear a
12 greater resemblance to reality:

	<u>Actual</u>	<u>Beck Calculation</u>	<u>One-Half Trend Assumed Base Load</u>	<u>August Only Analysis</u>
1994	22.17	22.17	22.17	22.17
1995	21.77	20.67	21.41	21.47
1996	21.39	19.17	20.66	20.76
1997	20.53	17.67	19.90	20.06
1998	18.78	16.17	19.15	19.36
1999	18.52	14.67	18.39	18.65
2000	18.15	13.17	17.63	17.95
2001	16.87	11.67	16.88	17.24
2002	17.09	10.17	16.12	16.54
2003	16.24	8.67	15.36	15.84
2004		7.17	14.61	15.13

⁷ While the use of one half of the trend being considered base load driven is illustrative only, the order of magnitude is reasonable given the results of the July and August analysis provided in footnote 2.

	<u>Actual</u>	<u>Beck Calculation</u>	<u>One-Half Trend Assumed Base Load</u>	<u>August Only Analysis</u>
2005		<i>5.67</i>	<i>13.85</i>	<i>14.43</i>
2006		<i>4.17</i>	<i>13.09</i>	<i>13.73</i>
2007		<i>2.67</i>	<i>12.34</i>	<i>13.02</i>
2008		<i>1.17</i>	<i>11.58</i>	<i>12.32</i>
2009		<i>(0.33)</i>	<i>10.83</i>	<i>11.61</i>

1 The first column shows actual average August Residential usage, and the second column
2 shows Mr. Beck's calculation of this usage based on his interpretation of my analysis. The
3 third column (One-Half Trend Assumed Base Load) calculates average August usage on
4 the assumption that one-half of the identified Kansas City Residential trend in my analysis
5 is base load related, and the last column (August Only Analysis) provides expected average
6 usage based on a statistical analysis of August Residential usage in all areas.⁸ Clearly, Mr.
7 Beck's base load calculation is understated. I split the table and italicized entries beyond
8 2004 in the table as a reminder that my adjustment stops at September 2004. I would not
9 propose that my attrition load results be used to project usage another five years into the
10 future as those entries would require. It very well may be the case that the rate of load loss
11 will decline a number of years from now, and such extrapolations would deny this
12 possibility. The point in including the entries for 2005 through 2009 in the table is only to
13 highlight the problem associated with Mr. Beck's calculation.

⁸ The following regression results show a negative 0.704 Ccf per year trend for Residential August usage:

$$\text{Usage per Bill} = 23.022 - 0.704 \text{ Trend} \quad R^2 = 0.96$$

(78.27) (14.85)

Each of the coefficients in these July-August results is statistically significant at the 99% confidence level as indicated by the t-statistics shown in parentheses.

1 **Q. WHY SHOULD THE COMMISSION REJECT STAFF WITNESS BECK'S**
2 **SECOND REASON FOR OPPOSING THE LOAD ATTRITION ADJUSTMENT?**

3 A. Mr. Beck points out that such an adjustment has never been proposed by the Company and
4 that "an adjustment like this has never been proposed by any gas utility to the best of my
5 knowledge" (Rebuttal Testimony of Daniel I. Beck, page 1, lines 27-29). It is correct that
6 the Company has never presented an attrition adjustment for the Commission's
7 consideration. However, other utilities have proposed, and state regulatory commissions
8 have accepted, load attrition adjustments. Surrebuttal Schedule FJC-6 provides excerpts
9 from 11 natural gas distribution company cases and three water company cases in which
10 regulatory commissions recognize declining load patterns in setting the affected utilities'
11 rates.

12
13 **Q. PLEASE DISCUSS STAFF WITNESS BECK'S THIRD REASON FOR OPPOSING**
14 **THE ADJUSTMENT.**

15 A. Mr. Beck suggests that the adjustment should be rejected because "one cannot assume that
16 the historical trend will continue" (Rebuttal Testimony of Daniel I. Beck, page 2, line 4). I
17 would agree with Mr. Beck if I had proposed to reflect load losses many years into the
18 future. In fact, the attrition adjustment is measured only through the end of September of
19 this year. It is simply unreasonable to assume that the statistically significant trend
20 confirmed through the analysis of nine years of historical experience will disappear as
21 quickly as Mr. Beck's statement would suggest.

22

1 **Q. PLEASE DISCUSS STAFF WITNESS BECK'S FOURTH REASON FOR**
2 **OPPOSING THE LOAD ATTRITION ADJUSTMENT.**

3 A. Mr. Beck states that the adjustment should be rejected because it is an out-of-period
4 adjustment. I explain why I do not agree with this reasoning in my earlier discussion of
5 Staff witness Oligschlager's assessment of the attrition adjustment.
6

7 **Q. PLEASE EXPLAIN WHY STAFF WITNESS BECK'S FIFTH REASON FOR**
8 **OPPOSING THE ADJUSTMENT HAS NO BASIS.**

9 A. Mr. Beck claims that the "Load Attrition Adjustment should be disallowed because it is
10 incorrectly assigned to both the summer and winter seasons" (Rebuttal Testimony of
11 Daniel I. Beck, page 2, lines 7-8). As explained above, Mr. Beck's belief that load attrition
12 is only a summer phenomenon is incorrect, and this basis for rejecting the adjustment has
13 no merit. There is no reason to perform the type of seasonal analysis that Mr. Beck
14 conducts when it is recognized that attrition has an impact throughout the year.
15

16 I would note that Mr. Beck's statistical analysis that is designed to capture the base load
17 trend through his "summer trend" variable is questionable since four of the six months that
18 he includes in the summer contain some heating degree days, albeit fewer than in the
19 remaining winter months. As a result, it is unclear what his coefficient of the "summer
20 trend" captures, and it is not surprising that this suggested "summer trend" tends not to be
21 statistically significant.
22

1 **Q. PLEASE DISCUSS STAFF WITNESS BECK'S FINAL REASON FOR OPPOSING**
2 **THE LOAD ATTRITION ADJUSTMENT.**

3 A. Mr. Beck claims that "[t]he Load Attrition Adjustment, when coupled with significant
4 changes in rate design, can result in extra, undocumented revenue for the Company"
5 (Rebuttal Testimony of Daniel I. Beck, page 2, lines 13-15). He bases his claim on the
6 insignificance of the "summer trend" factor in his statistical analysis and concludes that
7 "Dr. Cummings trend factor would incorrectly remove Ccfs from the summer months"
8 (Rebuttal Testimony of Daniel I. Beck, page 13, lines 6-7). As I explained above, there is
9 no reason to perform the type of seasonal analysis that Mr. Beck conducts when it is
10 recognized that attrition has an impact throughout the year. Thus, there is no basis at all for
11 "throwing out the summer load attrition adjustments" (Rebuttal Testimony of Daniel I.
12 Beck, page 13, lines 1-2). In addition, I have explained that Mr. Beck's own analysis of a
13 "summer trend" is questionable.

14
15 There are no shifts or inaccuracies in my calculations.⁹ The calculation of rates in my
16 proposed rate design correctly assigns the attrition adjustment by month and, within each
17 month, allocates the adjustment to each level of usage based on volumes at that level of
18 usage compared to monthly total volumes.

19

⁹ The fact that the load attrition adjustment results in larger monthly reductions in the months of July through September than in the remaining months of the year results simply from the fact that two Julys, two Augusts, and two Septembers will have passed between the end of the test year (June 2003) and the cut off of the adjustment (September 2004), while only one of each of the remaining months will have passed in this period of time.

1 **5. MISCELLANEOUS SERVICE CHARGES**

2

3 **Q. WHICH PARTIES ADDRESS YOUR PROPOSED CHANGES IN**
4 **MISCELLANEOUS SERVICE CHARGES THROUGH THEIR REBUTTAL**
5 **TESTIMONY AND WHAT WERE THEIR RECOMMENDATIONS?**

6 A. OPC witness Meisenheimer discusses my proposed increases in standard connect and
7 reconnect fees and restates OPC's opposition to these increases. Since OPC witness
8 Meisenheimer did not address the proposed increase in the transfer fee, I assume that OPC
9 does not object to this change. OPC witness Meisenheimer did not address reconnects at
10 the curb and at the main, although I indicated in my rebuttal testimony that the Company is
11 willing to drop the proposed increases in these two types of reconnections for the purpose
12 of this proceeding (Rebuttal Testimony of F. Jay Cummings, page 19, lines 16-18). As a
13 result of this concession, the Company and Staff are in agreement regarding proposed
14 miscellaneous service charge changes. No other party addresses the proposed changes in
15 service charges.

16

17 **Q. PLEASE SUMMARIZE OPC WITNESS MEISENHEIMER'S REASONS FOR**
18 **OPPOSING YOUR CHANGES IN THE STANDARD CONNECT AND**
19 **RECONNECT FEES.**

20 A. OPC witness Meisenheimer opposes the changes based on the size of the proposed changes
21 and on her concern regarding components of my cost study supporting the proposed
22 changes.

1 **Q. DO YOU HAVE ANY COMMENTS PERTAINING TO OPC WITNESS**
2 **MEISENHEIMER'S CONCERN ABOUT THE SIZE OF THE PROPOSED**
3 **INCREASES IN THE STANDARD CONNECT AND RECONNECT FEES?**

4 **A.** Yes. I note that these are one-time charges that, at their proposed levels, are significantly
5 below the average recurring cost of one month of gas service. For example, with Staff's
6 normal Residential usage, current gas cost costs, and current base rates, the cost of one
7 month of gas service is \$75.98 compared to the proposed \$45.00 connect and reconnect
8 fees. While I do not intend to suggest that the proposed charges are trivial in magnitude,
9 the fact remains that a customer who cannot afford to pay the one-time fee to initiate or
10 reconnect service will be very unlikely able to pay for gas service on a monthly basis.

11
12 Second, the reason for the size of the increase in the connect fee relates to the fact that
13 when this charge was approved for the first time in the Company's last rate case (Case No.
14 GR-2001-0292), it was set at a level that recovered approximately one-half of the cost to
15 provide the service. By contrast, the reconnect fee has been increased to levels that more
16 closely recovered costs in each of the last two rate cases, i.e. from \$15 to \$29 in Case No.
17 GR-98-140 and from \$29 to \$35 in Case No. GR-2001-292. If the proposed increase in the
18 connect fee is not implemented, the relationship between the charge for the service and the
19 cost to perform it will become further and further out of line over time, requiring even
20 greater increases in the future if cost causation principles are to be followed.

21
22 Finally, Laclede Gas Company ("Laclede") has similar service initiation and reconnect
23 charges, \$36 and \$54, respectively. Laclede's service initiation charge was a new charge

1 when introduced in 2001. The current level of the reconnect charge was approved in 1999.

2 I would expect that Laclede's costs to provide service initiation and reconnects have
3 increased in the years that have passed since these charges were last adjusted.

4
5 **Q. DO YOU HAVE ANY COMMENTS PERTAINING TO OPC WITNESS**
6 **MEISENHEIMER'S CONCERNS ABOUT YOUR COST STUDY SUPPORTING**
7 **THE PROPOSED CHARGES?**

8 A. Yes. OPC witness Meisenheimer's characterization of many of the cost elements as "joint
9 and common" is correct only in the sense that, for example, a customer service
10 representative handles not only connect and reconnect calls but also may handle billing
11 inquiries, and a field service person may not only perform connects and reconnects but also
12 may handle meter tests and replacements. The question is not whether "the costs could be
13 avoided" (Rebuttal Testimony of Barbara Meisenheimer, page 21, line 18) because they
14 will not be avoided. The relevant question is whether and how a portion of these costs can
15 be assigned to cost causers, i.e. for connection and reconnects. I have discussed the
16 importance of following principles of cost causation in determining service charges in my
17 rebuttal testimony (Rebuttal Testimony of F. Jay Cummings, page 20, line 9 – page 21, line
18 5).

19
20 Next, OPC witness Meisenheimer appears to argue the cost causation goal requires setting
21 customer specific connect charges (Rebuttal Testimony of Barbara Meisenheimer, page 22,
22 lines 1-5). Such a proposal takes the notion of cost causation to an extreme that would be
23 extremely costly to administer and would likely lead to customer objections.

1 Third, OPC witness Meisenheimer challenges the inclusion of field personnel
2 nonproductive time in the cost study. I disagree because the costs associated with vacation,
3 sick leave, holidays, training and standby time are no different than wages and associated
4 taxes. They are all part of the full labor cost associated with a field service employee
5 devoting an hour to provide a specific service. However, in discussing this issue, Staff
6 witness Imhoff noted that "MGE's use of the factor did not materially affect the rate
7 calculation. Staff believes the proposed charges are representative of the (sic) MGE's costs
8 for those services" (Direct Testimony of Thomas M. Imhoff, page 7, line 22 - page 8, line
9 2).

10
11 Finally, while recognizing that inclusion of missed appointments reflects cost causality,
12 OPC witness Meisenheimer objects to its inclusion in the cost study because she believes it
13 is unfair for customers who keep appointments to bear the cost associated with those who
14 miss appointments (Rebuttal Testimony of Barbara Meisenheimer, page 22, lines 15-19).
15 This is no different from her argument that connect and reconnect charges should be
16 individualized for each customer. The fact is that missed appointments represent a real
17 cost of providing reconnects and connects, as Ms. Meisenheimer recognizes, and
18 developing a single connect or reconnect charge based on average costs to provide the
19 service is a reasonable practice and one that I have followed. While I do not agree with
20 Ms. Meisenheimer's suggestions to eliminate non-productive time and the cost of missed
21 appointments from the cost study, I would note that incorporating her suggestions into the
22 cost study would result in connect or reconnect costs of approximately \$41, well above the
23 current \$35 reconnect charge and the \$20 connect charge.

1 In short, I continue to recommend that the Commission approve my proposed
2 miscellaneous service charges, with the elimination of the proposed increases in reconnects
3 at the main and at the curb in this case (Rebuttal Testimony of F. Jay Cummings, page 19,
4 lines 16-18). The Staff and I agree that these changes properly reflect cost causation.
5

6 **6. CLASS COST OF SERVICE STUDIES AND CLASS REVENUE**

7 **ALLOCATIONS**

8

9 **6.1 Class Cost of Service Study Results**

10

11 **Q. WHAT PARTIES DISCUSS CLASS COST OF SERVICE STUDIES AND CLASS**
12 **REVENUE ALLOCATION THROUGH THEIR REBUTTAL TESTIMONY?**

13 A. In addition to the Staff and OPC who also address these topics in their direct testimony,
14 Gary C. Price presents testimony of behalf of the Federal Executive Agencies ("FEA") and
15 Donald E. Johnstone presents testimony on behalf of Central Missouri State University and
16 the Midwest Gas Users' Association ("CMSU/MGUA").
17

18 **Q. PLEASE EXPLAIN THE CLASS COST OF SERVICE STUDY ISSUES RAISED**
19 **BY FEA WITNESS PRICE AND CMSU/MGUA WITNESS JOHNSTONE.**

20 A. Both witnesses note a cell reference error in the meter installation weighting factor in my
21 cost of service study (Rebuttal Testimony of Gary C. Price, page 6, line 7 – page 8, line 2
22 and Rebuttal Testimony of Donald. E. Johnstone, Schedule 4). I acknowledge the error and

1 concur with the revised study results shown on page 8 of FEA witness Price's rebuttal
2 testimony.

3
4 FEA witness Price states that general plant and associated expenses should be allocated
5 based on payroll expense (Rebuttal Testimony of Gary C. Price, page 11, line 22 – page 12,
6 line 2). I disagree. Approximately 63% of general plant is related to automated meter
7 reading equipment.¹⁰ The level of this investment is clearly driven by the number of
8 customers served and not by payroll. Therefore, this portion of general plant should be
9 classified as entirely customer related and allocated on the basis of relative customer
10 counts.

11
12 Both FEA witness Price and CMSU/MGUA witness Johnstone argue that my study
13 overallocates costs to the LVS class because I do not take into account the fact that this
14 class is largely composed of transportation customers. One or both witnesses support their
15 position by discussing my treatment of meter reading expenses, gas supply acquisition and
16 planning administration expenses, and rate base items of gas inventory and the portion of
17 cash working capital associated with gas costs.¹¹

18
19 CMSU/MGUA witness Johnstone provides no support for his belief that LVS meter
20 reading costs should be lower than this cost for other classes other than mentioning that

¹⁰ Schedule FJC-3, page 3, line 28 shows automated meter reading plant of \$34,236,118, and line 31 shows total general plant of \$54,397,804 as of June 30, 2003.

¹¹ See Rebuttal Testimony of Gary C. Price, page 12, lines 12-13 and Rebuttal Testimony of Donald E. Johnstone, page 8, line 3 – page 9, line 5.

1 electronic gas metering equipment is used for LVS customers. I would note that automated
2 meter reading is used throughout MGE's service territory, so meter reading costs for non-
3 LVS classes may not be higher, as Mr. Johnstone suggests.

4
5 Regarding resources devoted to gas supply acquisition costs that these witnesses maintain
6 should not be attributed to LVS customers, I note that the Company also has employees
7 who are dedicated full-time to serving the LVS class and others who spend substantial time
8 dealing with LVS matters.¹² My study does not directly assign the costs associated with
9 these LVS-related employees to the LVS class nor does it segregate gas supply acquisition
10 resource costs. If I had, the model results would likely change very little, if at all.

11
12 Regarding the allocation of gas inventory costs and the gas cost portion of cash working
13 capital to the LVS class, I would note that LVS customers are not restricted to taking only
14 transportation service, and gas inventory provides a backup capability to LVS customers in
15 the event of pipeline or supply-related delivery difficulties. For this reason, I allocated a
16 portion of gas inventory costs to the LVS class.¹³ One could argue that I should have used
17 something less than the full LVS demand for this allocation, but I know of no study that
18 could be performed to determine a reasonable reduction in this full allocation.
19 Furthermore, I do not think that such an adjustment is necessary because my study
20 arguably overstates the revenue credit provided to the LVS class, and, thus, understates the

¹² The Company has four full-time employees devoted to gas supply and three full-time employees dedicated to LVS matters. In addition to these three full-time employees, eight other employees devote between 10% and 30% of time to serving LVS customer needs.

¹³ If one were to eliminate the gas cost portion of working capital from the allocation of working capital to the LVS class, it would not have a material impact because the working capital portion of rate base (including gas costs) allocated to the LVS is less than 0.7% of the total rate base allocated to the LVS class.

1 required LVS increase, because the credit is largely associated with miscellaneous services
2 charges paid by the sales customer classes.

3
4 The simple fact is that any cost of service study necessarily entails simplifications and
5 judgments. As a result, no study should be considered anything more than a guide to the
6 regulatory authority as it decides how a revenue increase should be distributed among
7 customer classes.

8
9 **Q. DO YOU HAVE ANY COMMENTS REGARDING CMSU/MGUA WITNESS**
10 **JOHNSTONE'S SUGGESTED REVISION TO YOUR STUDY TO ALLOCATE**
11 **ONLY THE DEMAND PORTION OF MAINS THAT ARE SIX INCHES OR**
12 **LARGER TO THE LVS CLASS?**

13 A. The conceptual basis of CMSU/MGUA witness Johnstone's suggested revision, i.e. larger
14 volume customers require larger size mains to meet their demands, seems to have appeal.
15 However, his calculation oversimplifies the issue and suggests a level of precision that is
16 not achievable. The fact of the matter is that the Company's mains represent an integrated
17 system built to serve the needs of all customers. Unless certain mains are connected
18 directly to a pipeline and are dedicated to serve one or a few customers, it is not possible to
19 say with certainty what mains serve what customers. In fact, Mr. Johnstone's argument
20 could be used to allocate a smaller share of the demand portion of mains to the Residential
21 and SGS classes because these customers do not require, for example, six-inch mains to
22 meet their demands. I believe that it is reasonable to directly attribute mains of certain
23 sizes to certain customers only if those mains are dedicated to serve those customers needs.

1 I am not aware of any such mains in the Company's system. As a result, the system of
2 mains should be allocated to all classes, as I have done in my study.

3
4 **Q. CMSU/MGUA WITNESS JOHNSTONE'S FINAL SUGGESTED REVISION TO**
5 **YOUR STUDY DEALS WITH ELECTRONIC GAS MEASUREMENT**
6 **EQUIPMENT. PLEASE EXPLAIN.**

7 A. Mr. Johnstone argues that "LVS customers should receive appropriate recognition in the
8 class cost of service study of the \$5000 dollar (sic) contribution each is required to make to
9 MGE to defray the cost of metering. . . . The dollar value is in total \$2.4 million at this
10 time" (Rebuttal Testimony of Donald E. Johnstone, page 10, lines 11-15). Mr. Johnstone's
11 suggestion should be rejected. LVS customers have already received appropriate
12 recognition in my study because the Company's electronic gas measurement plant
13 (Account 385) balance shown on its books reflects plant net of any payments received from
14 LVS customers pursuant to tariff provisions. I use this plant balance, which totals
15 \$351,092 as of June 30, 2003, in my study.

16
17 **Q. DOES STAFF OR OPC RAISE ANY CONCERNS WITH YOUR COST OF**
18 **SERVICE STUDY IN THEIR REBUTTAL TESTIMONY?**

19 A. Yes, OPC witness Busch objects to my analysis that results in classification of a portion of
20 mains as customer-related and a portion as demand-related. Mr. Busch maintains that
21 mains should be considered entirely demand-related. Mr. Busch supports his position by
22 referencing a 1981 *Public Utilities Fortnightly* article. He indicates that the author states
23 that "when the distribution system is split between a minimum usage and an above-

1 minimum usage portion, and allocated on a customer/demand basis respectively, the low
2 use residential customer ends up paying more for the distribution system than is required to
3 serve that customer” (Rebuttal Testimony of James A. Busch, page 3, lines 2-5). By using
4 a zero-intercept study, as I have in preparing my cost of service study, there simply can be
5 no usage in the resulting customer portion of mains because a pipe of zero inches in
6 diameter can deliver no volumes.

7
8 Mr. Busch’s remaining support for his position is summarized in his claim that “to receive
9 compensation for merely having a line available to the customer does not make sense”
10 (Rebuttal Testimony of James A. Busch, page 4, lines 1-2). I disagree. While I agree with
11 Mr. Busch that MGE will not extend a gas main unless it expects to deliver gas in the area
12 to be served, our agreement ends at this point because I continue to maintain that the main
13 extension requires an investment to provide the new customers with access to gas service,
14 regardless of how much gas they use. This investment is the cost of the statistically-
15 determined zero-inch pipe from my mains study. This remainder of the actual investment
16 is associated with sizing the pipe to meet the new customers’ expected gas usage. This is
17 the point at which Mr. Busch’s given level of demand becomes appropriately considered.

6.2 Class Revenue Allocation Recommendations

Q. WHAT PARTIES PROVIDE CLASS REVENUE ALLOCATION RECOMMENDATIONS?

A. Staff and OPC provide class revenue allocation recommendations in their direct testimony, and I address these recommendations in my rebuttal testimony. FEA and CMSU/MGUA provide class revenue allocation recommendations in their rebuttal testimony.

Q. PLEASE EXPLAIN FEA'S CLASS REVENUE ALLOCATION RECOMMENDATION.

A. FEA witness Price recommends that the LGS class receive 75% of the system revenue increase, and the remaining classes receive identical increases that would be slightly larger than the percentage system increase (Rebuttal Testimony of Gary C. Price, page 14, line 6 – page 15, line 3). This proposal is not substantially different from Staff witness Beck's proposal that the increase be spread according to current class revenue responsibilities, a proposal that I indicated in my rebuttal testimony would not be unreasonable for the Commission to accept in this proceeding.

Q. PLEASE EXPLAIN CMSU/MGUA'S CLASS REVENUE ALLOCATION RECOMMENDATION.

A. CMSU/MGUA witness Johnstone recommends that class revenues be adjusted according to the results of my class cost of service study modified to reflect the approved revenue requirement components and the methodological revisions that he proposes (Rebuttal

1 Testimony of Donald E. Johnstone, page 22, lines 4-8). In the event that a modified study
2 is not available, CMSU/MGUA witness Johnstone recommends that the class revenue
3 responsibilities indicated in my class cost of service study be used to allocate the required
4 revenue increases to customer classes (Rebuttal Testimony of Donald E. Johnstone, page
5 22, lines 9-11). The latter recommendation produces results that are quite similar to my
6 class revenue allocation with slightly larger Residential, SGS, and LVS increases than I
7 originally proposed.

8
9 **Q. DO YOU HAVE ANY CONCLUDING COMMENTS PERTAINING TO CLASS**
10 **REVENUE ALLOCATION?**

11 A. I continue to believe that my class revenue allocation recommendations are sound. With
12 the correction in the cell reference error in my cost of service study noted by the FEA and
13 CMSU/MGUA, smaller SGS and LVS increases and a larger Residential revenue increase
14 would be required than shown in my original recommendation.¹⁴ At the same time, I
15 recognize the sizable increase that would be required for the Residential class. As a result,
16 I believe it would be reasonable for the Commission to allocate the increase
17 proportionately to all customer classes based on test year adjusted margin, consistent with
18 both Staff's recommendation and my alternative recommendation explained in my rebuttal
19 testimony and similar to FEA's recommendation.

20

¹⁴ The revenue changes associated with the Company's \$44,875,635 revenue deficiency for the test year ended June 30, 2003, shown on page 26, line 23 of my direct testimony would be modified to reflect a Residential increase of \$37,627,163, an SGS increase of \$6,092,665, and a LVS increase of \$1,155,807 based on the correction in my cost of service study explained in the previous section of my testimony.

7. RATE DESIGN

Q. WHAT PARTIES DISCUSS RATE DESIGN THEIR REBUTTAL TESTIMONY?

A. Staff, OPC, FEA, and CMSU/MGUA discuss various aspects of my rate design recommendations.

7.1 LGS/LVS Rate Design

Q. WHAT ASPECTS OF LGS/LVS RATE DESIGN DOES FEA ADDRESS?

A. FEA witness Price opposes my initial recommendation to change the months included in the winter and summer season for the LGS and LVS classes (Rebuttal Testimony of Gary C. Price, page 15, lines 7-9). As I explained in my rebuttal testimony, the Company agreed to withdraw this change for these classes during the May 2004 prehearing conference (Rebuttal Testimony of F. Jay Cummings, page 29, lines 6-8). Since Mr. Price did not address any other aspect of my proposed LGS and LVS rate design, e.g. increased customer charges, I assume that the seasonal issue is all he is referring to when he states that "no rate design changes should be made for the LGS and LVS rate classes" (Rebuttal Testimony of Gary C. Price, page 15, lines 9-10).

1 **Q. WHAT ASPECTS OF LGS/LVS RATE DESIGN DOES CMSU/MGUA ADDRESS?**

2 A. CMSU/MGUA witness Johnston addresses two aspects of my recommended LVS rate
3 design. First, he opposes the change in seasons (Rebuttal Testimony of Donald E.
4 Johnstone, page 5, line 16 – page 6, line 12). As I explained above, the Company has
5 withdrawn this proposed change for this class. Second, Mr. Johnstone expressed concern
6 about the increase in the LVS customer charge because of the impact on certain multi-
7 meter customers (Rebuttal Testimony of Donald E. Johnstone, page 6, line 13 – page 7,
8 line 2). The treatment that I proposed for LVS multi-meter customer charge discounts in
9 my rebuttal testimony (Rebuttal Testimony of F. Jay Cummings, page 38, line 14 – page
10 40, line 3) is consistent with Mr. Johnstone’s suggested resolution of his concern (Rebuttal
11 Testimony of Donald E. Johnstone, page 6, lines 21-22). Other than raising the multi-
12 meter LVS discount issue, Mr. Johnstone does not present any testimony opposing the
13 proposed LVS customer charge. I conclude that CMSU/MGUA does not oppose my
14 proposed LVS customer charge if the multi-meter discount change that I recommend is
15 implemented.

17 **7.2 Weather-Mitigation Rate Design**

18
19 **Q. WHAT ASPECTS OF RATE DESIGN DOES STAFF ADDRESS?**

20 A. Staff witness Beck addresses my recommended weather-mitigation rate design. Mr. Beck
21 first questions the ability to establish the rate design without controversy because of his
22 belief “that the proper level of first block volumes is even less certain in this case since

1 MGE does not currently have a blocked rate in effect for the Residential Class”¹⁵ (Rebuttal
2 Testimony of Daniel I. Beck, page 17, lines 1-3). This is an incorrect conclusion.
3 Recognizing the challenges experienced in ultimately calculating final rates for Laclede’s
4 weather-mitigation structure, I developed detailed test year Residential bill frequency data,
5 i.e. number of bills at each and every Ccf usage level for each month of the test year, as
6 shown in my work papers. The base data is available and verifiable. As part of my work
7 papers, I then spread each of my volume-related adjustments, i.e. revenue adjustments, to
8 each level of usage in each month. If the Commission were to accept any other party’s
9 adjustments, these adjustments could easily be incorporated into the detailed spreadsheets
10 that I have developed. Mr. Beck’s assumption that the billing determinant experience with
11 Laclede will repeat itself in this case is unfounded based on data that I have developed to
12 support the proposed weather-mitigation rate design.

13
14 Mr. Beck next describes the Laclede rate design as experimental, and it is too early to
15 thoroughly analyze it (Rebuttal Testimony of Daniel I. Beck, page 17, lines 10-16).¹⁶
16 Although I am not at all convinced that the weather-mitigation rate design was adopted as
17 an experiment for Laclede, I would suggest that a more convincing assessment of possible
18 solutions to the problem of variability in revenue streams would involve one alternative in
19 the eastern part of the state for Laclede and another in the western part of the state for
20 MGE.

¹⁵ The Company currently has a blocked structure for the SGS class, and my weather-mitigation design for this class does not change the blocking. As a result, block-specific billing data is readily available and is provided for the test year in my work papers.

¹⁶ Mr. Beck mentions possible ACA audit concerns. The Company must and will provide auditable, by-block volume data for any ACA period. If any other ACA audit issues arise as a result of the Laclede experience, the Company is committed to working with Staff to address any such issues.

1 Mr. Beck's last concern is that "MGE's risk is clearly related to this issue [weather
2 mitigation-rate design]. I contend that weather mitigation rate design, weather
3 normalization, load attrition, and rate of return are all related issues" (Rebuttal Testimony
4 of Daniel I. Beck, page 17, lines 22-24 with bracketed phrase added). I explained why Mr.
5 Beck's concern about a link between load attrition and the proposed rate design is incorrect
6 in the final portions of Section 4 of my testimony. I do not see a link between the weather
7 normalization adjustment and only the proposed rate design. Unless the Commission uses a
8 representative measure of normal weather in developing the revenues on which it calculates
9 rates, the Company will not have a reasonable opportunity to achieve those revenues once
10 the rates are implemented, whether or not the weather-mitigation rate design is
11 implemented. This leaves an alleged link between the proposed rate design and rate of
12 return, something that may be addressed by the Commission's cost of capital determination
13 in this proceeding.

14
15 **Q. DOES MR. BECK OFFER ANY ALTERNATIVES TO THE PROPOSED**
16 **WEATHER MITIGATION RATE DESIGN?**

17 A. Yes. For the Residential class, Mr. Beck proposes a declining block structure with a
18 "moderate differential" of "two to three cents per Ccf" between the blocks (Rebuttal
19 Testimony of Daniel I. Beck, page 18, lines 15-16). Such a proposal would do little to
20 address the realities facing the Company that I addressed in my rebuttal testimony
21 (Rebuttal Testimony of F. Jay Cummings, page 30, line 16 – page 31, line 9). Given the
22 possible additional, yet resolvable, complexities associated with the ACA audit process and
23 data required for setting rates, I understand Mr. Beck's reluctance to support the weather-

1 mitigation rate design. I acknowledge that the proposed rate design is a “work around” to
2 address the inadequacies in the current rate design. As a result, I did provide the
3 Commission with another way to address these problems in my rebuttal testimony, i.e.
4 implementation of higher customer charges and an experimental Weather Normalization
5 Clause (Rebuttal Testimony of F. Jay Cummings, page 34, line 1 – page 38, line 12). The
6 Commission’s choice of this alternative would provide it with an opportunity to
7 productively assess another possible (and much more generally accepted) way of
8 addressing weather variability in revenue streams for natural gas distributors.
9

10 **Q. WHAT ASPECTS OF RATE DESIGN DID OPC ADDRESS?**

11 A. OPC witness Busch addresses my recommended Residential customer charges and
12 weather-mitigation rate design. OPC witness Meisenheimer addresses my recommended
13 Residential weather-mitigation rate design.
14

15 **Q. WHAT CONCLUSION DOES MR. BUSCH REACH REGARDING THE**
16 **PROPOSED RESIDENTIAL CUSTOMER CHARGE?**

17 A. Referencing to the NARUC Gas Distribution Rate Design Manual (June 1989), OPC
18 witness Busch opposes my Residential customer charge because my calculated customer
19 cost includes items that “go far beyond the scope of items that should be included in a
20 customer charge according to the NARUC manual” (Rebuttal Testimony of James A.
21 Busch, page 5, lines 4-5). The NARUC manual, however, indicates that “[a] portion of the
22 costs associated with the distribution system may be included as customer costs” (page 22).
23 The manual, in fact, mentions mains costs as one such distribution system component,

1 although indicating that it may be controversial. The other items that OPC witness Busch
2 lists as inappropriate are intangible plant and general plant. However, intangible plant is
3 allocated based on distribution plant, a portion of which even Mr. Busch would agree is
4 customer related, and 63% of total general plant is composed on the Company's automated
5 meter reading investment, clearly a customer cost (see Rebuttal Testimony of F. Jay
6 Cummings, page 25, line 11 – page 26, line 16). Mr. Busch simply disagrees with me on
7 what plant and expense items involve customer-related components.

8
9 Mr. Busch also argues that customer charges should be set as low as possible to promote
10 efficiency. He supports his position with three assertions. First, he argues that competitive
11 markets are not characterized by firms that charge the equivalent of a customer, or access
12 charge. While some firms do not assess this type of charge, others do. I would call Mr.
13 Busch's attention to some credit card providers, satellite television service companies,
14 social clubs, and wholesale buying clubs, such as Sam's Club, all of which assess a fixed
15 charge to provide access to their services as part of the pricing of their services.

16
17 Mr. Busch's second claim is that higher customer charges hurt the small user. This is an
18 equity argument, not an efficiency argument. I would maintain that moving customer
19 charges toward the level at which they recover all customer costs is equitable. The NARUC
20 manual that Mr. Busch cites, in fact, states that "[i]deally, the customer charge should
21 recover all customer costs" (page 49). The Residential customer charge that I have
22 proposed moves the current charge toward the customer cost level shown in my cost of
23 service study, but still falls well below it.

1 Mr. Busch's final argument is that higher customer charges do not promote conservation. I
2 do not agree. Even if volumetric rates were entirely eliminated, which no party is proposing
3 in this proceeding, Residential customers would still have a strong incentive to conserve.
4 Based on Staff's normal Residential usage and today's base and cost of gas rates, 75% of
5 the average Residential bill reflects the cost of gas. A customer would save \$7.51 for each
6 10 Ccf reduction in usage at today's gas costs, and those savings are totally unrelated to the
7 Residential base rate design.
8

9 **Q. WHAT IS OPC'S RECOMMENDATION ON YOUR PROPOSED RESIDENTIAL**
10 **WEATHER-MITIGATION RATE DESIGN?**

11 A. OPC opposes the rate design through the testimony of OPC witness Bush and OPC witness
12 Meisenheimer.
13

14 **Q. PLEASE ADDRESS OPC WITNESS BUSCH'S CLAIMS RELATED TO THE**
15 **PROPOSED WEATHER-MITIGATION RATE DESIGN.**

16 A. OPC witness Busch argues that the Company's weather risk is virtually eliminated and that
17 this not the role of regulation by the Commission (Rebuttal Testimony of James A. Busch,
18 page 7, lines 22-23). In a similar vein, he argues that "customers will be basically charged
19 a fixed dollar amount per month" (Rebuttal Testimony of James A. Busch, page 8, lines 10-
20 11). I disagree with Mr. Busch's policy perspective that the Commission should not
21 address a company's weather risk in its rate design decisions. Mr. Busch must believe that
22 this Commission made a bad policy decision in accepting OPC's recommendation, among
23 other parties, to implement the Laclede weather-mitigation rate design and that numerous

1 regulatory commissions throughout the country that have approved weather normalization
2 clauses have also made poor policy decisions. OPC witness Busch seems to believe that
3 variability of revenue streams due to weather is an inherent and unavoidable part of being
4 in the natural gas local distribution business. The fact of the matter is that the existing
5 weather variability in revenue streams is a direct result of rate structure and, therefore, it is
6 entirely appropriate to mitigate this weather variability in revenue streams by rate structure
7 changes.

8
9 Mr. Busch's claims pertaining to elimination of weather risk and customers paying a fixed
10 dollar amount are not supported by the data that form the basis of the Residential rate
11 design. While weather risks are substantially reduced, they are not eliminated. If a winter
12 month is warmer than normal, the Company will not fully collect the revenue that this
13 Commission will use to set rates in this proceeding with the proposed weather-mitigation
14 rate design. The following table shows that the base rate portion of many Residential
15 customer bills (based on test year ended June 30, 2003) will fall with warm weather:

<u>Outcome of Warmer Than Normal Weather</u>	<u>Usage Range</u>	<u>Residential Bills, Nov.-Apr.</u>	
		<u>Number</u>	<u>Percent of Total</u>
Definite Bill Reductions	68 Ccf or less	596,562	23%
Probable Bill Reductions	69 Ccf – 80 Ccf	178,690	7%

20 The proposed rate design does exactly what its label portrays – it “mitigates” weather risk,
21 it does not “eliminate” weather risk.

22
23 OPC witness Busch also suggests that the Laclede weather-mitigation rate design should be
24 reviewed and analyzed before implementing the same type of rate design for MGE. As I
25 mentioned earlier, it is not at all clear to me that the Laclede weather-mitigation rate design

1 is an experiment. In any event, a more convincing assessment of possible solutions to the
2 problem of variability in revenue streams would involve one alternative in the eastern part
3 of the state for Laclede and another in the western part of the state for MGE. Under my
4 alternative rate design recommendation, the Commission would have an opportunity to
5 productively assess two types of alternatives, Laclede's weather-mitigation rate design and
6 MGE's Weather Normalization Clause. Additional experiments are not a bad thing because
7 they will provide additional information on which the Commission can make a sound
8 policy decision in the future.

9
10 Mr. Busch final point pertaining to the weather-mitigation rate design relates to his
11 opposition to the definition of the winter season to include the month of April, noting that
12 the gas storage injection season ends in March. The gas storage injection season has
13 nothing to do with base rate design. Additionally, the April billing period contains
14 substantial March usage as a result of cycle billing. Finally, the proposed seasonal
15 definitions were chosen to match the Laclede weather-mitigation rate design.

16
17 **Q. PLEASE ADDRESS OPC WITNESS MEISENHEIMER'S CLAIMS RELATED TO**
18 **THE PROPOSED WEATHER-MITIGATION RATE DESIGN.**

19 A. OPC witness Meisenheimer's evaluation of my Residential rate design is misleading and
20 contains errors (Rebuttal Testimony of Barbara Meisenheimer, page 11, line 16 – page 16,
21 line 4). Much of her discussion centers on her Table 4. The misleading character of her
22 discussion is revealed by reviewing the "At Average Residential Usage" column of this

table. It would seem to suggest that customers would annually pay \$11.94 more under my rate design than under her alternative design, which I label “volumetric.”¹⁷

Ms. Meisenheimer’s work papers show the following components of average bills each month under the two rate designs:

	Weather-Mitigation Design			Volumetric Design			Weather-Mitigation Vs. Volumetric Design		
	Base Rates	Gas Costs	Total Bill	Base Rates	Gas Costs	Total Bill	Base Rates	Gas Costs	Total
January	35.72	137.29	173.01	45.81	132.10	177.91	(10.09)	5.20	(4.90)
February	35.72	130.04	165.76	44.18	126.09	170.28	(8.47)	3.95	(4.51)
March	35.72	102.86	138.58	38.09	103.58	141.67	(2.37)	(0.72)	(3.09)
April	35.72	60.27	95.99	28.54	68.30	96.84	7.18	(8.03)	(0.85)
May	21.16	36.78	57.93	20.01	36.78	56.78	1.15	-	1.15
June	16.81	15.76	32.57	14.32	15.76	30.08	2.49	-	2.49
July	16.03	12.01	28.04	13.30	12.01	25.31	2.73	-	2.73
August	15.72	10.51	26.23	12.89	10.51	23.40	2.83	-	2.83
September	16.03	12.01	28.04	13.30	12.01	25.31	2.73	-	2.73
October	17.59	19.51	37.10	15.33	19.51	34.85	2.25	-	2.25
November	29.20	27.83	57.03	19.80	36.03	55.83	9.40	(8.20)	1.20
December	<u>35.72</u>	<u>82.92</u>	<u>118.64</u>	<u>33.62</u>	<u>87.06</u>	<u>120.68</u>	<u>2.10</u>	<u>(4.14)</u>	<u>(2.04)</u>
Annual	311.13	647.80	958.93	299.19	659.74	958.93	11.94	(11.94)	0.00

Clearly, the weather-mitigation rate design does not require customers to pay a “combined” amount of \$970.87 as shown in Table 4. Average use customers would pay a total of \$958.93, the same as under the volumetric rate design. Over the course of the year, average use customers would pay \$11.94 more in base rates but \$11.94 less in gas costs under the weather-mitigation rate design compared to the volumetric design.

More importantly, average total bills are lower for each of the winter months of December through April under the weather-mitigation rate design than under the volumetric rate

¹⁷ This alternative rate design continues the current customer charge and increases the current single volumetric rate to recover the same revenue as that collected under the weather-mitigation rate design.

design. These bills are lower at the time when customers have the greatest difficulty paying them. The winter bill differences become even more pronounced in a colder than normal winter. For example, if weather in Kansas City was 25 percent colder than normal in January, average Residential usage would increase by about 41 Ccf. The \$4.90 savings under the weather-mitigation rate design compared to the volumetric rate design shown above would grow to \$6.85.

Ms. Meisenheimer's addition of a "PGA ACA Adjustment" in the "At Average Residential Usage" column of Table 4 is incorrect. It apparently is based on her belief that gas costs are underrecovered with the weather-mitigation rate design because average bills result in \$11.94 less in gas costs. A review of my work papers pertaining to the development of the rate design shows that this is not the case. The following table shows gas cost collections with a single PGA rate of \$0.75056 and the two-block PGA rate used in the weather-mitigation rate design:

<u>Single PGA Rate of 0.75056</u>					
<u>Season</u>	<u>1st Block Volumes</u>	<u>2nd Block Volumes</u>	<u>1st Block Gas Costs</u>	<u>2nd Block Gas Costs</u>	<u>Total Gas Costs</u>
Nov-April	157,767,613	173,107,690	118,414,059	129,927,708	248,341,768
May-Oct	59,340,696	3,751,587	44,538,753	2,815,791	47,354,544
					<u>295,696,312</u>

<u>Block PGA Rate of 0.57985 and 0.90617 in Winter and 0.75056 in Summer</u>					
<u>Season</u>	<u>1st Block Volumes</u>	<u>2nd Block Volumes</u>	<u>1st Block Gas Costs</u>	<u>2nd Block Gas Costs</u>	<u>Total Gas Costs</u>
Nov-April	157,767,613	173,107,690	91,481,550	156,864,996	248,346,546
May-Oct	59,340,696	3,751,587	44,538,753	2,815,791	47,354,544
					<u>295,701,090</u>

The \$4,779 difference in total gas cost recovery is simply due to rounding of the PGA rate to five decimal places, consistent with billing system limitations.

1 **Q. DO YOU HAVE ANY OBSERVATIONS REGARDING THE REMAINING**
2 **COLUMNS OF TABLE 4?**

3 A. Yes. Based on her presentation of Table 4, I can only assume that the "PGA ACA
4 Adjustment" rows pertain to the expected, subsequent period ACA adjustments needed
5 because of overcollection or undercollection of gas costs resulting from abnormal weather.
6 I have already explained why her entry in this row under the "At Average Residential
7 Usage" column for the weather-mitigation rate design with normal weather should be zero,
8 not \$11.94. The "PGA ACA Adjustment" rows for each of the remaining columns of
9 Table 4 suffer from additional infirmities. Ms. Meisenheimer correctly presumes that an
10 ACA adjustment will be required with the weather-mitigation rate design following a
11 period of abnormal winter weather, but her calculation is unlikely to be correct. The
12 calculation is based on bill averages that leads to the problem that I previously discussed
13 rather than the billing determinants underlying the development of the rate design.

14
15 More importantly, Ms. Meisenheimer totally ignores the fact that these same abnormal
16 weather conditions will require ACA adjustments with her volumetric rate design. As an
17 example, consider her case of 10% less winter usage. Ms. Meisenheimer shows no "PGA
18 ACA Adjustment" with her volumetric rate design when in fact there would be a \$24.8
19 million undercollection in gas costs. If the undercollection is recovered over a year, Ms.
20 Meisenheimer's annual volumetric bills would increase by \$55.41.¹⁸

¹⁸ The weather-mitigation rate design will also result in an undercollection. This undercollection may be smaller or larger than the volumetric design depending on whether the weather variation has a greater or smaller relative impact on the first or second usage block volumes. The undercollection would be identical to the undercollection with the volumetric rate design if the percentage reductions in the first block volumes and the second block volumes are the same.

1 **Q. DO YOU HAVE ANY COMMENTS ON OPC WITNESS MEISENHEIMER'S**
2 **TABLE 5?**

3 A. Yes. Table 5 is easily misunderstood. This table contains calculations of the cost of gas
4 component of average use customer bills. This table ignores the non-gas portion of the
5 customer bills. With colder than normal weather, the weather-mitigation rate design
6 becomes particularly valuable to the customer. Ms. Meisenheimer's bottom panel of Table
7 5 shows that customers pay more in gas costs with the weather-mitigation rate design. The
8 panel would be more informative in terms of customer impacts if it had been expressed in
9 terms of total bills as shown below:

	25% Above	Volumetric Design:	Weather-Mitigation Design:
<u>Month</u>	<u>Average Use</u>	<u>Uniform Rate of 0.75056</u>	<u>Company Proposal</u>
November	60	\$ 67.27	\$ 67.90
December	145	148.34	144.92
January	220	219.87	212.88
February	210	210.33	203.82
March	172.5	174.57	169.84
April	113.75	118.54	116.60

18 Over the six-month period, customers save \$22.96 with the weather-mitigation rate design
19 compared to OPC witness Meisenheimer's volumetric rate design.

20
21 **Q. DO YOU HAVE ANY CONCLUDING COMMENTS ON OPC WITNESS**
22 **MEISENHEIMER'S EVALUATION OF THE PROPOSED WEATHER-**
23 **MITIGATION RATE DESIGN?**

24 A. Yes. OPC witness Meisenheimer lists six reasons that she believes causes customers to be
25 worse off with the proposed rate design (Rebuttal Testimony of Barbara Meisenheimer,
26 page 14, line 8 – page 16, line 4). The first and second reasons relate to her Table 4, which
27 I have shown to be faulty. Her third reason focuses only on the non-gas portion of

1 customer bills and does not mention the fact that her volumetric rate design results in
2 higher total bills “during the coldest months of the year” (Rebuttal Testimony of Barbara
3 Meisenheimer, page 15, lines 8-9),

4
5 OPC witness Meisenheimer’s fourth reason, that the higher customer charge “serves as an
6 additional obstacle to a customer’s ability to lower their [sic] monthly bill” (Rebuttal
7 Testimony of Barbara Meisenheimer, page 15, lines 14-15), ignores the fact that, due to the
8 higher customer charge, customer bills are lower in the winter months when paying these
9 bills is most difficult. Furthermore, as I have already discussed, customers will have a
10 strong incentive to conserve when they can save \$7.50 with a 10 Ccf reduction in usage
11 with today’s gas costs, regardless of the base rate design.

12
13 Mr. Meisenheimer’s fifth reason relates to her belief that implementation of the weather-
14 mitigation rate design requires a cost of capital adjustment. This issue can be addressed by
15 the Commission in its determination of the cost of capital in this proceeding.

16
17 OPC witness Meisenheimer finally argues that the weather-mitigation rate design
18 “increases upward volatility of customers’ utility bills in a colder than normal winter”
19 (Rebuttal Testimony of Barbara Meisenheimer, page 16, lines 3-4). Quite the contrary, it is
20 Ms. Meisenheimer’s volumetric rate design that produces not only higher winter bills but
21 also more volatile winter bills.
22

1 OPC witness Meisenheimer also argues that the PGA/ACA process with the weather-
2 mitigation rate design is harmful to customers (Rebuttal Testimony of Barbara
3 Meisenheimer, page 16, line 5 – page 17, line 18). Much of this discussion is based on the
4 results shown in her Table 4, which I have demonstrated is faulty and incomplete, e.g.
5 ignoring ACA impacts during abnormal weather with her volumetric rate design.
6

7 **Q. DO YOU HAVE ANY CONCLUDING COMMENTS REGARDING THE**
8 **WEATHER-MITIGATION RATE DESIGN?**

9 A. Yes. As I previously mentioned, I acknowledge that the proposed rate design is a “work
10 around” to address the inadequacies in the current rate design. As a result, I did provide
11 the Commission with another way to address these problems in my rebuttal testimony, i.e.
12 implementation of higher customer charges and an experimental Weather Normalization
13 Clause (Rebuttal Testimony of F. Jay Cummings, page 34, line 1 – page 38, line 12). The
14 Commission’s choice of this alternative would provide it with an opportunity to
15 productively assess two alternative solutions to the problem of weather variability in
16 revenue streams for gas distribution operations, Laclede’s weather-mitigation rate design
17 and MGE’s Weather Normalization Clause.
18

19 No party has credibly denied the existence of a real and material problem with MGE’s rate
20 structure that has consistently resulted in a shortfall in revenue streams and earnings for
21 MGE, yet no party – other than MGE – has offered any meaningful solution to the
22 problem. Simply pretending that the problem associated with the current rate design does
23 not exist will not make the problem go away.

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

2 **A. Yes.**

RESIDENTIAL CLASS GROWTH ANNUALIZATION ADJUSTMENT

		Growth Adjustment Alternatives					
	Staff	<u>Last Calendar Year</u>		<u>Last Two Years</u>		<u>Last Three Years</u>	
	<u>Normal</u>	<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>
Jan	183	299,057	50,580	377,794	63,897	267,325	45,214
Feb	177	289,545	49,494	365,778	62,525	258,823	44,242
Mar	138	225,172	42,141	284,457	53,236	201,281	37,669
Apr	93	151,979	33,780	191,993	42,673	135,854	30,196
May	52	84,615	26,085	106,893	32,952	75,637	23,317
Jun	22	36,724	20,614	46,393	26,042	32,828	18,427
Jul	20	32,551	20,137	41,121	25,439	29,097	18,001
Aug	17	28,239	19,645	35,674	24,817	25,243	17,560
Sep	19	31,096	19,971	39,283	25,229	27,796	17,852
Oct	27	44,417	21,493	56,112	27,152	39,704	19,212
Nov	47	76,946	25,209	97,205	31,846	68,782	22,534
Dec	119	<u>194,352</u>	<u>38,620</u>	<u>245,522</u>	<u>48,788</u>	<u>173,730</u>	<u>34,522</u>
		1,494,693	\$367,768	1,888,226	\$464,597	1,336,100	\$328,746

		Growth Adjustment Alternatives					
Company		<u>Last Calendar Year</u>		<u>Last Two Years</u>		<u>Last Three Years</u>	
		<u>Normal</u>	<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>
Jan	180	293,802	49,980	371,156	63,139	262,628	44,677
Feb	169	275,867	47,931	348,500	60,551	246,597	42,846
Mar	139	227,851	42,447	287,842	53,622	203,676	37,943
Apr	93	151,181	33,688	190,985	42,558	135,140	30,114
May	51	82,975	25,897	104,821	32,716	74,171	23,150
Jun	23	37,238	20,673	47,042	26,116	33,287	18,479
Jul	20	31,958	20,070	40,372	25,354	28,567	17,940
Aug	17	28,177	19,638	35,596	24,808	25,187	17,554
Sep	19	30,948	19,954	39,096	25,208	27,664	17,837
Oct	27	44,147	21,462	55,771	27,113	39,463	19,185
Nov	50	80,947	25,666	102,260	32,423	72,359	22,942
Dec	117	<u>191,623</u>	<u>38,308</u>	<u>242,074</u>	<u>48,394</u>	<u>171,291</u>	<u>34,244</u>
		1,476,714	\$365,714	1,865,513	\$462,002	1,320,029	\$326,911

**SMALL GENERAL SERVICE CLASS GROWTH ANNUALIZATION
ADJUSTMENT**

Growth Adjustment Alternatives							
	Staff	Last Calendar Year		Last Two Years		Last Three Years	
	<u>Normal</u>	<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>
Jan	487	842,345	134,175	933,126	148,635	596,079	94,948
Feb	478	827,445	132,390	916,620	146,658	585,535	93,685
Mar	379	656,311	109,965	727,042	121,816	464,434	77,816
Apr	254	438,903	60,436	486,205	66,949	310,587	42,767
May	151	261,492	45,414	289,673	50,308	185,043	32,137
Jun	87	150,732	36,092	166,977	39,981	106,665	25,540
Jul	87	151,330	36,159	167,639	40,055	107,087	25,587
Aug	80	138,796	35,101	153,755	38,884	98,218	24,839
Sep	88	153,004	36,338	169,494	40,254	108,272	25,714
Oct	104	179,788	38,540	199,164	42,694	127,226	27,273
Nov	133	229,749	53,670	254,509	59,454	162,580	37,979
Dec	313	<u>541,997</u>	<u>94,621</u>	<u>600,408</u>	<u>104,818</u>	<u>383,540</u>	<u>66,958</u>
		4,571,892	\$812,900	5,064,611	\$900,507	3,235,266	\$575,243

Growth Adjustment Alternatives							
	Company	Last Calendar Year		Last Two Years		Last Three Years	
	<u>Normal</u>	<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>
Jan	480	831,380	132,734	920,979	147,039	588,320	93,928
Feb	455	787,635	127,149	872,520	140,852	557,364	89,976
Mar	383	662,423	110,771	733,813	122,709	468,759	78,386
Apr	255	440,531	60,573	488,008	67,101	311,739	42,864
May	149	257,489	45,077	285,238	49,935	182,210	31,899
Jun	86	149,566	35,994	165,685	39,873	105,840	25,471
Jul	86	148,073	35,885	164,031	39,752	104,783	25,394
Aug	80	138,634	35,087	153,574	38,869	98,103	24,829
Sep	87	150,801	36,152	167,053	40,048	106,713	25,583
Oct	102	176,675	38,279	195,715	42,404	125,023	27,088
Nov	138	238,998	54,886	264,756	60,802	169,126	38,840
Dec	312	<u>540,020</u>	<u>94,361</u>	<u>598,218</u>	<u>104,531</u>	<u>382,141</u>	<u>66,774</u>
		4,522,225	\$806,949	5,009,592	\$893,915	3,200,120	\$571,032

LARGE GENERAL SERVICE CLASS GROWTH ANNUALIZATION ADJUSTMENT**Growth Adjustment Alternatives**

	Staff Normal	<u>Last Calendar Year</u>		<u>Last Two Years</u>		<u>Last Three Years</u>	
		<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>
Jan	9,074	(319,232)	(38,740)	(234,358)	(28,440)	(206,636)	(25,076)
Feb	9,433	(331,868)	(40,158)	(243,635)	(29,481)	(214,815)	(25,994)
Mar	8,206	(288,693)	(35,314)	(211,938)	(25,925)	(186,869)	(22,859)
Apr	4,653	(163,709)	(13,457)	(120,184)	(9,879)	(105,967)	(8,711)
May	6,730	(236,771)	(18,156)	(173,821)	(13,329)	(153,260)	(11,752)
Jun	6,792	(238,953)	(18,296)	(175,423)	(13,432)	(154,672)	(11,843)
Jul	1,440	(50,674)	(6,188)	(37,202)	(4,543)	(32,801)	(4,005)
Aug	1,365	(48,011)	(6,016)	(35,246)	(4,417)	(31,077)	(3,894)
Sep	1,564	(55,035)	(6,468)	(40,403)	(4,748)	(35,624)	(4,187)
Oct	2,039	(71,733)	(7,542)	(52,661)	(5,537)	(46,432)	(4,882)
Nov	4,255	(149,709)	(19,723)	(109,906)	(14,479)	(96,905)	(12,767)
Dec	7,003	<u>(246,375)</u>	<u>(30,567)</u>	<u>(180,871)</u>	<u>(22,440)</u>	<u>(159,476)</u>	<u>(19,786)</u>
		(2,200,764)	\$(240,626)	(1,615,648)	\$(176,651)	(1,424,535)	\$(155,755)

Growth Adjustment Alternatives

	Company Normal	<u>Last Calendar Year</u>		<u>Last Two Years</u>		<u>Last Three Years</u>	
		<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>	<u>Volumes</u>	<u>Dollars</u>
Jan	9,867	(347,116)	(41,868)	(254,829)	(30,737)	(224,685)	(27,101)
Feb	9,000	(316,625)	(38,448)	(232,444)	(28,226)	(204,949)	(24,887)
Mar	7,601	(267,419)	(32,928)	(196,321)	(24,173)	(173,098)	(21,314)
Apr	4,939	(173,768)	(14,104)	(127,568)	(10,354)	(112,478)	(9,129)
May	6,870	(241,680)	(18,471)	(177,424)	(13,560)	(156,437)	(11,956)
Jun	6,630	(233,260)	(17,930)	(171,243)	(13,163)	(150,987)	(11,606)
Jul	1,489	(52,400)	(6,299)	(38,469)	(4,624)	(33,918)	(4,077)
Aug	1,387	(48,790)	(6,067)	(35,818)	(4,454)	(31,581)	(3,927)
Sep	1,609	(56,606)	(6,569)	(41,556)	(4,823)	(36,640)	(4,252)
Oct	2,205	(77,563)	(7,917)	(56,941)	(5,812)	(50,206)	(5,125)
Nov	3,544	(124,685)	(16,916)	(91,535)	(12,419)	(80,708)	(10,950)
Dec	6,931	<u>(243,828)</u>	<u>(30,282)</u>	<u>(179,002)</u>	<u>(22,231)</u>	<u>(157,828)</u>	<u>(19,601)</u>
		(2,183,740)	\$(237,798)	(1,603,150)	\$(174,575)	(1,413,516)	\$(153,924)

LOAD ATTRITION ADJUSTMENT ENDING IN APRIL 2004

	Volumes			Dollars			Total
	<u>Kansas City</u>	<u>Joplin</u>	<u>St. Joseph</u>	<u>Kansas</u>	<u>Joplin</u>	<u>St. Joseph</u>	
<u>Residential</u>							
Jul	(524,646)	(93,555)	(53,001)	(59,930)	(10,687)	(6,054)	
Aug	(521,699)	(93,229)	(53,001)	(59,594)	(10,650)	(6,054)	
Sep	(520,961)	(93,454)	(52,696)	(59,509)	(10,675)	(6,019)	
Oct	(521,775)	(94,131)	(52,801)	(59,602)	(10,753)	(6,032)	
Nov	(526,169)	(95,702)	(53,182)	(60,104)	(10,932)	(6,075)	
Dec	(531,356)	(96,775)	(53,867)	(60,697)	(11,055)	(6,153)	
Jan	(534,332)	(97,190)	(54,585)	(61,037)	(11,102)	(6,235)	
Feb	(536,606)	(97,586)	(54,773)	(61,297)	(11,147)	(6,257)	
Mar	(537,640)	(97,575)	(54,982)	(61,415)	(11,146)	(6,281)	
Apr	(536,253)	(96,807)	(55,089)	(61,256)	(11,058)	(6,293)	
May	-	-	-	-	-	-	
Jun	-	-	-	-	-	-	
Jul	-	-	-	-	-	-	
Aug	-	-	-	-	-	-	
Sep	-	-	-	-	-	-	
Total	(5,291,438)	(956,005)	(537,977)	\$ (604,441)	\$ (109,204)	\$ (61,453)	\$ (775,098)
<u>SGS</u>							
Jul	(211,666)	(32,510)	(18,873)	(17,692)	(2,711)	(1,575)	
Aug	(211,818)	(32,591)	(19,030)	(17,734)	(2,713)	(1,589)	
Sep	(211,923)	(32,486)	(18,852)	(17,702)	(2,696)	(1,577)	
Oct	(208,089)	(32,149)	(18,443)	(17,396)	(2,670)	(2,431)	
Nov	(211,861)	(32,876)	(19,011)	(27,841)	(4,323)	(2,494)	
Dec	(214,968)	(33,267)	(19,304)	(28,084)	(4,357)	(2,520)	
Jan	(216,032)	(33,522)	(19,255)	(28,107)	(4,375)	(2,505)	
Feb	(215,595)	(33,380)	(18,991)	(28,012)	(4,353)	(2,465)	
Mar	(213,359)	(33,217)	(18,686)	(27,768)	(4,341)	(1,527)	
Apr	(206,428)	(32,164)	(18,065)	(17,123)	(2,676)	(1,499)	
May	-	-	-	-	-	-	
Jun	-	-	-	-	-	-	
Jul	-	-	-	-	-	-	
Aug	-	-	-	-	-	-	
Sep	-	-	-	-	-	-	
Total	(2,121,739)	(328,163)	(188,511)	\$ (227,459)	\$ (35,214)	\$ (20,181)	\$ (282,854)

LOAD ATTRITION ADJUSTMENT ENDING IN APRIL 2004
(Continued)

	Volumes			Dollars			<u>Total</u>
	<u>Kansas City</u>	<u>Joplin</u>	<u>St. Joseph</u>	<u>Kansas City</u>	<u>Joplin</u>	<u>St. Joseph</u>	
<u>LGS</u>							
Jul	(54,300)	-	(7,506)	(3,492)	-	(483)	
Aug	(55,783)	-	(7,784)	(3,587)	-	(501)	
Sep	(56,339)	-	(7,792)	(3,623)	-	(501)	
Oct	(57,636)	-	(7,228)	(3,707)	-	(465)	
Nov	(57,822)	-	(8,066)	(6,486)	-	(905)	
Dec	(59,675)	-	(8,062)	(6,694)	-	(904)	
Jan	(60,045)	-	(8,340)	(6,736)	-	(936)	
Feb	(63,381)	-	(8,062)	(7,110)	-	(904)	
Mar	(61,528)	-	(7,228)	(6,902)	-	(811)	
Apr	(73,574)	-	(7,506)	(4,732)	-	(483)	
May	-	-	-	-	-	-	
Jun	-	-	-	-	-	-	
Jul	-	-	-	-	-	-	
Aug	-	-	-	-	-	-	
Sep	-	-	-	-	-	-	
	(600,082)	-	(77,573)	(53,070)	-	(6,892)	\$ (59,961)
Total Through April 2004							<u><u>\$(1,117,914)</u></u>

LOAD ATTRITION ADJUSTMENT ENDING IN DECEMBER 2003

	Volumes			Dollars			Total
	<u>Kansas City</u>	<u>Joplin</u>	<u>St. Joseph</u>	<u>Kansas</u>	<u>Joplin</u>	<u>St. Joseph</u>	
<u>Residential</u>							
Jul	(524,646)	(93,555)	(53,001)	(59,930)	(10,687)	(6,054)	
Aug	(521,699)	(93,229)	(53,001)	(59,594)	(10,650)	(6,054)	
Sep	(520,961)	(93,454)	(52,696)	(59,509)	(10,675)	(6,019)	
Oct	(521,775)	(94,131)	(52,801)	(59,602)	(10,753)	(6,032)	
Nov	(526,169)	(95,702)	(53,182)	(60,104)	(10,932)	(6,075)	
Dec	(531,356)	(96,775)	(53,867)	(60,697)	(11,055)	(6,153)	
Jan	-	-	-	-	-	-	
Feb	-	-	-	-	-	-	
Mar	-	-	-	-	-	-	
Apr	-	-	-	-	-	-	
May	-	-	-	-	-	-	
Jun	-	-	-	-	-	-	
Jul	-	-	-	-	-	-	
Aug	-	-	-	-	-	-	
Sep	-	-	-	-	-	-	
Total	(3,146,606)	(566,847)	(318,548)	\$ (359,437)	\$ (64,751)	\$ (36,388)	\$ (460,575)
<u>SGS</u>							
Jul	(211,666)	(32,510)	(18,873)	(17,692)	(2,711)	(1,575)	
Aug	(211,818)	(32,591)	(19,030)	(17,734)	(2,713)	(1,589)	
Sep	(211,923)	(32,486)	(18,852)	(17,702)	(2,696)	(1,577)	
Oct	(208,089)	(32,149)	(18,443)	(17,396)	(2,670)	(2,431)	
Nov	(211,861)	(32,876)	(19,011)	(27,841)	(4,323)	(2,494)	
Dec	(214,968)	(33,267)	(19,304)	(28,084)	(4,357)	(2,520)	
Jan	-	-	-	-	-	-	
Feb	-	-	-	-	-	-	
Mar	-	-	-	-	-	-	
Apr	-	-	-	-	-	-	
May	-	-	-	-	-	-	
Jun	-	-	-	-	-	-	
Jul	-	-	-	-	-	-	
Aug	-	-	-	-	-	-	
Sep	-	-	-	-	-	-	
Total	(1,270,325)	(195,880)	(113,513)	\$ (126,449)	\$ (19,469)	\$ (12,186)	\$ (158,104)

LOAD ATTRITION ADJUSTMENT ENDING IN DECEMBER 2003
(Continued)

	Volumes			Dollars			Total
	<u>Kansas City</u>	<u>Joplin</u>	<u>St. Joseph</u>	<u>Kansas City</u>	<u>Joplin</u>	<u>St. Joseph</u>	
<u>LGS</u>							
Jul	(54,300)	-	(7,506)	(3,492)	-	(483)	
Aug	(55,783)	-	(7,784)	(3,587)	-	(501)	
Sep	(56,339)	-	(7,792)	(3,623)	-	(501)	
Oct	(57,636)	-	(7,228)	(3,707)	-	(465)	
Nov	(57,822)	-	(8,066)	(6,486)	-	(905)	
Dec	(59,675)	-	(8,062)	(6,694)	-	(904)	
Jan			-	-			
Feb			-	-			
Mar			-	-			
Apr			-	-			
May	-	-	-	-	-	-	
Jun	-	-	-	-	-	-	
Jul	-	-	-	-	-	-	
Aug	-	-	-	-	-	-	
Sep	-	-	-	-	-	-	
	(341,554)	-	(46,437)	(27,590)	-	(3,758)	\$ (31,346)
Total Through December 2003							<u><u>\$(650,028)</u></u>

REGULATORY COMMISSION CASES RECOGNIZING DECLINING USAGE TRENDS

NATURAL GAS COMPANY CASES:

MidAmerican Energy, Iowa Utilities Board, 2002 Iowa PUC LEXIS 499

“5. The settlement billing determinants reflect one-half of the adjustment for ‘declining usage per customer’ originally proposed by MidAmerican. The Board denied this adjustment in temporary rates, reserving final judgment for the full case. The Board finds that the billing determinants reflected in the settlement are reasonable.” (p. 15)

Rochester Gas and Electric Corporation, New York Public Service Commission, 2003 N.Y. PUC LEXIS 140

“The Judge also accepted the Company’s forecast of use per customer, . . . concluding that its projection properly reflected a steady trend of declining use per customer since 1996.” (p. 10)

“Current circumstances continue to support RG&E’s projected use per customer.” (p. 11)

Arkansas Louisiana Gas, Arkansas Public Service Commission, 150 PUR 4th 333 (1994)

“Additionally, ALG calculated a compound rate of decrease in residential consumption of over the last 20 years of 1.97 percent. (T. Ex. 1561). Staff agreed that there has been a decline in base load, but disputed ALG’s estimate of annual load loss. Staff testified to a load loss of 0.95 percent. (T. Ex. 1300).” (p. 369)

“Additionally, the Commission finds that Staff’s calculations of customer growth and load loss are much more straightforward than ALG’s. ALG’s calculation involves speculation about conservation matters that are largely unsubstantiated, while Staff’s approach avoids the difficulty of trying to measure the many factors that could contribute to the apparent decline in consumption.” (p. 370)

REGULATORY COMMISSION CASES RECOGNIZING DECLINING USAGE TRENDS

NATURAL GAS COMPANY CASES (Continued)

Niagara Mohawk Power Corporation, New York Public Service Commission, 1984 N.Y. PUC LEXIS 276

“Heating and non-heating sales have to be forecast separately, they [the Judges] said, because of the differing trends in consumption: non-heating usage (about 25%) is relatively stable, while heating usage (about 75 %) has been declining ‘substantially’ over the last four to six years.” (p. 17, bracketed words added)

“Under the circumstances, we conclude the best alternative is to accept the Judges’ recommendation with the two corrections suggested by staff.” (p. 22) (Note: The staff suggested modifications to the Judges’ forecast to account for the seasonal variation in the number of customers and to measure the usage decline with a regression analysis using six years of data.)

Indiana Gas Company, Indiana Public Service Commission, 1982 Ind. PUC LEXIS 115 Indiana Gas Company, Indiana Utility Regulatory Commission, 86 PUR 4th 241 (1987)

Excerpt from the 1982 case:

“The study showed that, after normalization for the effects of weather, average consumption of the residential customers has steadily declined from 141.30 mcf at the beginning of 1981 to 137.84 mcf at the end of 1981.” (p. 8)

“First, unlike the ‘conservation adjustment’ recently rejected, the data on which the Petitioner’s proposed adjustment is based was not challenged as inaccurate, unreliable or erratic. Second, the proposed adjustment in this cause does not seek to project lower levels of consumption beyond the actual consumption levels experienced at the end of the test year. As such, Petitioner does not seek to establish that future reductions in usage per customer will occur and that such a future occurrence is known, fixed and measurable. Rather, the Petitioner seeks only to persuade the Commission that test year end consumption levels are more representative of future usage patterns than are the average test year consumption levels. On balance, we believe that Petitioner has presented sufficient reliable evidence to support such a conclusion in this cause. Third, the major argument against such an adjustment presented by the Public was that ‘such adjustments have not been made in the past.’ As time passes and circumstances change, it is only fitting and proper that parties to the ratemaking process proposed new and different methods to reflect such changed circumstances.” (pp. 11-12)

REGULATORY COMMISSION CASES RECOGNIZING DECLINING USAGE TRENDS

NATURAL GAS COMPANY CASES (Continued)

Washington Natural Gas Company, Washington Utilities & Transportation Commission, Cause Nos. U-80-25, U-80-27 (1980)

"After commencement of the hearing, respondent added a proposal that the Commission include in its deliberations consideration of evidence that the company is experiencing a post-test-year loss of revenue due to declining use by customers." (p. 3)

Staff did not adjust test-year revenues to recognize declining use other than in the adjustment for therms in December, 1979 and billed in January, 1980." (p. 10)

"The Commission concludes that the recent consumption trend demonstrated in this record justifies an adjustment to net operating income in the amount of \$1,203,000." (p.11)

East Ohio Gas Company, Ohio Public Utilities Commission, 16 PUR 4th 137 (1976)

"The staff analysis of applicant's test-year operations resulted in a recommendation that applicant's test year revenue for its entire operations be increased by \$2,595,000 to adjust that revenue for the warmer than average weather experienced during the test year." (p. 147)

"The applicant countered by arguing, however, that by adjusting its revenue to reflect weather normalization the staff has focused on only one variable which can vary the sales mix that may result in the average future year. The applicant considers two quantifiable variables in forecasting its future sales, one of which is weather. The second, what the applicant calls the consumption factor, is the number of cubic feet of gas which will be consumed per customer per degree-day. The consumption factors for both the applicant's residential and commercial customers have declined since 1974 ... That exhibit shows that if adjustments are made to applicant's revenues to reflect both normalization of weather and consumption factors, test-year revenues would decrease by \$543,000.

Given the above, and noting that there is no convincing support in the record for the proposition that it is more appropriate to normalize applicant's test-year revenues for variations in weather than it is to normalize them for variations in consumption factors, the commission finds that staff's adjustment of test-year system wide revenues to reflect weather normalization was inappropriate." (pp. 147-48)

REGULATORY COMMISSION CASES RECOGNIZING DECLINING USAGE TRENDS

NATURAL GAS COMPANY CASES (Continued)

North Penn Gas Company, Pennsylvania Public Utilities Commission, 55 Pa PUC 425 (1981)

“North Penn contends that its analysis of the level of test-year sales volumes did give consideration to a weather adjustment but in view of current trends in conservation and alternate fuel usage, it declined to make any weather adjustment on the theory that such an adjustment would be entirely offset by a downward adjustment for continuing conservation and alternative fuel usage. ... since 1975, usage per degree-day for residential and commercial customer of North Penn has decreased substantially by 21.3 per cent and 16.9 percent, respectively, at an annual rate of 4.3 per cent and 3.4 per cent, respectively.

“We are persuaded that the weather normalization adjustment recommended by the ALJ would overstate pro forma Mcf sales for the reason that a comparison of the December 31, 1980, and July 31, 1980, average use per degree-day establishes a continuation of the trend of reduced degree-day consumption.

We find the company’s annualization adjustment acceptable, and we will not further adjust test-year sales, as urged by the trial staff.” (p. 428)

Consumers Power Company, Michigan Public Service Commission, Case U-5732 (1983)

Michigan Consolidated Gas Company, Michigan Public Service Commission, Case U-7298 (1983)

Excerpt from Consumers Power case:

“Both Applicant and the Staff assumed a conservation factor of 3% for residential space heating customers for 1980 and 1981 in determining the sales level.” (pp. 164-65)

“The Commission finds that the use of a 3% conservation figure is reasonable and should be adopted.” (p. 166)

REGULATORY COMMISSION CASES RECOGNIZING DECLINING USAGE TRENDS

WATER COMPANY CASES

Pennsylvania-American Water Company, Pennsylvania Public Utilities Commission, R-901652 (1990)

“We recognize that there is an experienced trend of reduced per capita consumption. Even when examining the unadjusted data the trend is evident. We do not believe that the OCA consumption level based on a five year average from 1985 through 1989 is reflective of the future test year or the time period that rates will be in effect. Particularly with the transition to monthly billing, it seems to us that lowered per capita consumption will be experienced once customers are fully integrated into the more frequent reminder of their level of consumption.” (p. 51)

Long Island Water Corporation, New York Public Service Commission, Case 27535 (1980)

“ On rebuttal, ... [T]he company contends that there is a declining trend in weather sensitive consumption that should be recognized in the rate year revenue forecast in this proceeding.” (p. 3)

“Staff has, however, criticized LWIC’s attempt in this new forecast to trend weather load consumption. Staff is correct that the company’s effort here is defective to the extent that it fails to identify and treat separately the effects of weather on weather sensitive consumption from the effects of conservation that have also apparently influenced weather load in recent years. But staff’s approach is also flawed in that it does not adequately account for the recently observed pattern of declining weather sensitive consumption.

We shall adopt the company’s rebuttal forecast as most representative of the revenues LIWC can expect in the rate years. We think this forecast is the most reasonable one presented in this record, although it may be somewhat understated.” (p. 4)

Port Chester Water Works, Inc., New York Public Service Commission, Case 27603 (1980)

“Staff’s estimate was derived from projections based on Port Chester’s historic experience, and, in the case of residential class customer, included the calculation of an average consumption per customer derived from ten years of historical data.” (pp. 2-3)

“A shortcoming of the company’s procedure is its extreme dependence on base year data, particularly in the absence of corroborative evidence for their credibility. By failing to include any trended analysis and rejecting any allowance for weather-related usage, the company in effect asserts that one year’s results will provide an accurate gauge of rate year experience. But as staff has noted, we have established a policy of using forecasting techniques that include normalization and extensive historical data. We are reluctant to depart from that policy, on the basis that the company’s showing in this case, merely because the end results of the two methods are comparable. Accordingly, we adopt staff’s revenue estimate.” (p. 4)

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Missouri Gas Energy's
Tariff Sheets Designed to Increase Rates
for Gas Service in the Company's Missouri
Service Area.

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Case No. GR-2004-0209

AFFIDAVIT OF F. JAY CUMMINGS

STATE OF TEXAS

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COUNTY OF TRAVIS

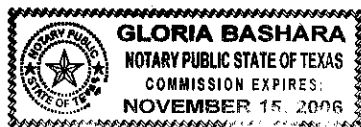
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ss.

F. Jay Cummings, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Surrebuttal Testimony in question and answer form, to be presented in the above case; that the answers in the foregoing Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.


F. JAY CUMMINGS

Subscribed and sworn to before me this 9th day of June 2004.




Notary Public

My Commission Expires: 11/15/06