Exhibit No.:	
Issue:	*Adjustment for Excess Transportation Capacity*
Witness:	*Lesa A. Jenkins*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Surrebuttal Testimony*
Case Nos.:	*GR-2003-0330, GR-2002-348 (Consolidated)*
Date Testimony Prepared:	*July18, 2006*

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

OF

LESA A. JENKINS

MISSOURI GAS ENERGY
CASE NOS. GR-2003-0330 AND GR-2002-348
(Consolidated)

Jefferson City, Missouri
July 2006

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****Denotes Highly Confidential Information****

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Missouri Gas Energy's Purchased Gas Adjustment Factors to be Audited in Its 2002-2003 Actual Cost Adjustment.	))))	Case No. GR-2002-0330
In the Matter of Missouri Gas Energy to Make its Unscheduled Winter Adjustment to the Purchased Gas Adjustment (PGA) Rate as Permitted Under the Provisions of Sheet No. 24.11 of MGE's Tariff.		Case No. GR-2002-348 (Consolidated)

AFFIDAVIT OF LESA A. JENKINS

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Lesa A. Jenkins, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Direct Testimony in question and answer form, consisting of 46 pages to be presented in the above case; that the answers in the foregoing Direct Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of her knowledge and belief.

Lesa A. Jenkins
Lesa A. Jenkins

Subscribed and sworn to before me this 18th day of July 2006.

Toni M. Charlton

TONI M. CHARLTON NOTARY SEAL NOTARY PUBLIC STATE OF MISSOURI

TONI M. CHARLTON
Notary Public - State of Missouri
My Commission Expires December 28, 2008
Cole County
Commission #04474301

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LESA A. JENKINS

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SURREBUTTAL TESTIMONY

OF

LESA A. JENKINS

MISSOURI GAS ENERGY

CASE NOs. GR-2003-0330 AND GR-2002-348

(CONSOLIDATED)

Q. Please state your name and business address.

A. Lesa A. Jenkins, P.O. Box 360, Jefferson City, MO 65102.

Q. By whom are you employed and in what capacity?

A. I am a Regulatory Engineer in the Procurement Analysis Department with the Missouri Public Service Commission (Commission).

Q. Are you the same Lesa A. Jenkins who filed direct and rebuttal testimony in the consolidated Case Nos. GR-2003-0330 and GR-2002-348?

A. Yes, I am.

EXECUTIVE SUMMARY

Q. Please summarize your surrebuttal testimony.

A. My direct, rebuttal and surrebuttal testimonies provide support for a disallowance for excess capacity for the Kansas City and St. Joseph service areas for Missouri Gas Energy's (MGE) 2001/2002 and 2002/2003 ACA periods. MGE did not adequately evaluate customers' natural gas requirements for a peak (coldest) day. As a result, MGE purchased more capacity than it needed to meet its customers' needs on a peak day. Staff evaluated the cost of this excess reserve margin and recommends that $2,041,931 be refunded to customers for the 2001/2002 ACA, Case No. GR-2002-348, and $2,015,661 for the 2002/2003 ACA, Case No. GR-2003-0330.

Staff evaluated MGE's plans and documented its concerns with those plans and explained why the Company's methodology for calculation of peak day requirements was not reasonable. The analysis that MGE relied on when making decisions for the 2001/2002 ACA period was summarized in its 2001/2002 Reliability Report. A summary of my concerns with the MGE Reliability Report and its capacity planning for the 2001/2002 ACA are summarized in my testimony regarding MGE's selection of peak heating degree day (HDD), MGE's calculation of baseload and heatload used to estimate peak day requirements, and MGE's failure to evaluate requirements for each service area.

MGE witness John J. Reed does not comment on the MGE 2001/2002 Reliability Report, but instead does an after-the-fact review of MGE data. My concerns with Mr. Reed's after-the-fact analysis are summarized in my testimony regarding his selection of peak HDD and his calculation of baseload and heatload used to estimate peak day requirements.

Since MGE's methodology was unreasonable, Staff had to calculate a reasonable peak day estimate. Staff then used the estimate to quantify the costs to MGE's customers. Staff does not state that there is only one reasonable method to estimate peak day requirements. My testimony explains why Staff's analysis of peak day requirements is a more reasonable approach than the MGE analyses in its 2001/2002 and 2002/2003 Reliability Reports and the flawed analysis sponsored by MGE witness John J. Reed in his direct and rebuttal testimony, an analysis that was conducted only **after** the ACA periods in question. My testimony also explains that Staff considered more than one method to assure that its estimates were reasonable by conducting several regression analyses and by considering alternative methodologies of estimating peak day requirements. All of this information and Staff's analysis is based on information that MGE knew or should have known at the time it was making pipeline capacity decisions for the 2001/2002 ACA period that continue to impact subsequent ACA periods.

MGE witnesses John J. Reed and David N. Kirkland stated that because two contract decisions were made prior to the 2001/2002 ACA period, Staff's adjustment was not valid. However, a prior decision that increases capacity in the 2001/2002 ACA must be considered when MGE contract decisions impact total pipeline capacity for the 2001/2002 ACA period. Although one MGE decision impacted sixteen days of the 2000/2001 ACA period, it is the 2001/2002 ACA period, an ACA period that begins July 1, 2001, that first bears the full cost of this contract decision. In evaluating prudence issues, Staff considers the costs (damages) to customers that are incurred as a result of MGE's imprudent decision making.

MGE witnesses Reed and Kirkland refer to comments that Staff provided to MGE in prior ACA reviews. However, they fail to note that I expressed concerns with MGE's documentation related to its reliability analysis in the 1999/2000 and 2000/2001 ACA reviews. Staff is providing its recommendation in these consolidated cases for the 2001/2002 ACA and the 2002/2003 ACA, not the ACA cases of 1998/1999 and earlier, as referenced by Mr. Reed and Mr. Kirkland.

Staff presents information showing that MGE witness David N. Kirkland's arguments in his rebuttal testimony are invalid regarding capacity release and transportation discounts being tied to the Staff adjustment for excess capacity. Additionally, Mr. Kirkland's comments regarding general benefits of MGE's pipeline capacity and storage decisions are not valid because these benefits do not disappear with Staff's adjustment.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of MGE witnesses John J. Reed and David N. Kirkland related to Staff's proposed adjustments for Missouri Gas Energy (MGE or Company), Case Nos. GR-2003-0330 and GR-2002-348. My surrebuttal testimony is specifically related to "Excess Transportation Capacity."

SURREBUTTAL OF REED REBUTTAL – STATING THAT STAFF'S ANALYSIS FAILS TO MEET GENERALLY ACCEPTED PRUDENCE REVIEW STANDARDS

Q. Mr. Reed states that Ms. Jenkins did not rely upon information and circumstances that existed at the time the decisions were made to support her analysis (Reed rebuttal, p. 3, ll. 5-6). Do you agree with Mr. Reed's statement?

A. No. Staff reviewed information provided by MGE that demonstrated what MGE knew at the time it made its decisions. Staff's concern is that MGE did not use the information that it had and unreasonably increased capacity without adequate evaluation of the data.

Additionally, Staff has determined that the methodology used by MGE to estimate how much gas it would need if a peak day occurred was unreasonable. Because MGE's analysis is unreasonable, Staff had to consider an alternate reasonable analysis, and this analysis considers MGE data for November 1, 1997 through March 31, 2001. All of this information and analysis is based on information that MGE knew or should have known at the time it was making capacity decisions for the 2001/2002 ACA period that continued to impact subsequent ACA periods. I have documented in my direct testimony why the MGE method is not reasonable. (The discussion of peak heating degree day begins on page 12, the discussion of Staff's disagreement with MGE's peak day methodology begins on page 19, and the discussion of the imprudent decision for 2001/2002 and 2002/2003 begins on page 29.)

Q. Mr. Reed states that Ms. Jenkins did not consider that reasonable and appropriate decisions may vary over a wide range (Reed rebuttal, p. 3, ll. 7-8, p. 10, ll. 8-16). Do you agree with Mr. Reed's statement?

A. No. I considered several regression analyses of the daily data for each service area to obtain estimates of peak day requirements. I explain this in my direct testimony, page 20, line 20 through page 23, line 7. Additionally, I considered more recent data when evaluating the reserve margin for 2002/2003, simply as a check of the analysis for the 2001/2002 ACA, as explained on page 38, lines 4-16 of my direct testimony. Additionally, in an attempt to look at other reasonable methods for estimating usage requirements, Staff conducted another analysis for usage with HDD of 15 or greater (Jenkins direct, p. 39, l. 5 through p. 41, l. 15). This final review revealed net excess costs to customers for the 2002/2003 ACA period of $1,284,439 to $2,426,474, depending on how the transportation and capacity contracts were structured. (Staff provided three scenarios of how the transportation capacity and storage contracts could have been structured. Jenkins direct, p. 41, ll. 3-15). From this systematic analysis, Staff concluded that since its recommended adjustments of $2,041,931 in Case No. GR-2002-348 and $2,015,661 in Case No. GR-2003-0330 are within the range considered in these three scenarios, the Staff recommended adjustment is reasonable.

Q. Mr. Reed states that Ms. Jenkins, in her direct testimony, identified two specific capacity decisions by MGE that she believes to be imprudent. The first capacity decision was MGE's purchase of ** ______ ** MMBtu/day on the Pony Express interstate pipeline. The second capacity decision was MGE's renewal and consolidation of its Southern Star pipeline capacity. (Reed rebuttal, p. 4, l. 21 to p. 6, l. 22). Do you agree with Mr. Reed's statements?

A. No. Staff's direct testimony considers the increased capacity on ** ___ ____ **, because this increase must be considered in the total capacity that MGE had during the 2001/2002 ACA, but Staff does not state that the ** ____ ** decision was imprudent. My direct testimony refers to MGE's failure to adequately evaluate and document its decision to maintain the Southern Star total transportation contract volumes at the same level. My direct testimony p 29 lines 17 to page 30, line 10, states as follows:

> Q. Did the transportation capacity remain the same in 2001/2002 as in the prior winter?
>
> A. No. The transportation capacity increased from ** _________ _______ ** dekatherms per day because of a prior commitment on ** ____ **. Additionally, transportation contracts on ** __________________ ___________________________ **. The total contract volumes on ** ____________ ** remained the same, but there is no evaluation or documentation indicating that the transportation contract volumes could not have been reduced when the term was revised. The MGE decision to maintain the same transportation capacity on ** ________ ___ ** affects the costs to customers beginning in the 2001/2002 ACA and continuing through the 2005/2006 ACA. It is Staff's position that MGE has not adequately calculated its peak day requirements and has not provided justification for its excess reserve margin. MGE modified ** ____ ____ ____ _____ ** MGE did not evaluate customer demand to assure that its decision was prudent. Specifically MGE failed to adequately evaluate and document its decision to maintain the ** ____________ ** total transportation contract volumes at the same level.

Staff reviewed the transportation contract terms, and the review for the 2001/2002 ACA period revealed that MGE modified Southern Star (SSC)/Williams transportation contracts with a new term beginning June 15, 2001 and extending through ** _________ ____ **. MGE's decision to modify the Southern Star (SSC)/Williams transportation contracts impacted only 16 days of the entire 2000/2001 ACA period that ended June 30, 2001. It is not until the 2001/2002 ACA period that MGE indicates that the contracts have changed. The contract indicating the changes to SSC was provided to Staff in the 2001/2002 ACA review, not the 2000/2001 ACA review.[1]

MGE's 2000/2001 and 2001/2002 Reliability Reports lists the Southern Star (SSC)/Williams transportation contracts with the following market areas capacity:

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[1]The Southern Star contract was provided in the Company's response to DR No. 32, Case No. GR-2002-348, the 2001/2002 ACA review.

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It is important to keep in mind that the contract capacity for peak day planning is concerned with a potential peak cold day in the winter months, not the summer months, and the first winter impacted by MGE's contract changes effective June 15, 2001, is the 2001/2002 winter, not the 2000/2001 winter. Thus, it is appropriate to review the impact of this contract on MGE's total capacity to meet peak day requirements for the 2001/2002 ACA period.

Staff further disagrees with Mr. Reed's suggestion that MGE's capacity decisions identified as being imprudent were made well before the 2001/2002 and 2002/2003 ACA periods (Reed rebuttal, p. 7, ll. 7-21). MGE's decision regarding the Southern Star (SSC)/Williams transportation contracts only impacted 16 days of the 2000/2001 ACA period that ended June 30, 2001. The winter of 2000/2001 was not impacted by this contract change in June 2001. With a new contract term beginning June 15, 2001, and extending through ** _____________ **, it is the 2001/2002 ACA period, an ACA period that begins July 1, 2001, in which MGE's customers first bear the full cost of MGE's contract decision. It is not only the date the decision is made that is important in evaluating prudence issues but the costs (damages) to customers that are incurred as a result of MGE' imprudent decision making. In fact, it is possible that the financial consequence of MGE's decisions may occur years after the decision is first made.

Q. Do you have anything else to add regarding Mr. Reed's statements on pages 4 through 6 of his rebuttal testimony?

A. Yes. Staff agrees with Mr. Reed's statement that information that was available prior to June 2001 should have been considered prior to MGE's decision to renew and consolidate MGE's Southern Star contracts (Reed rebuttal, p. 6, ll. 18-19). MGE should have conducted a peak day capacity review on which it could reasonably rely prior to making the decision to maintain the same overall capacity level. This decision impacts costs for the 2001/2002 ACA period and will continue to impact MGE's capacity level through ** _____________ **. Staff's analysis considers MGE data for November 1, 1997 through March 31, 2001. MGE's analysis in the 2001/2002 Reliability Report, dated July 1, 2001, only considers a single data point to estimate heatload. **MGE also used a single data point**

in its 1999/2000[2] and 2000/2001 ACA reviews, even though the Reliability Reports that MGE relied on for those ACA periods indicate that a ** ____________________________ ____________________ **. As noted in Staff's recommendation in the 2001/2002 ACA case, Case No. GR-2002-348, and in the prior ACA case, Case No. GR-2001-382, Staff does not believe that the review of one cold day, a single data point review in each Reliability Report, is sufficient to establish the peak day heat load factor.

Q. In his rebuttal, Mr. Reed states that Ms. Jenkins failed to identify that Staff indicated that MGE's capacity planning standard was adequate at the time that MGE's capacity decisions were made (Reed rebuttal, p. 3, ll. 9-11, and p. 6, ll. 20-22). Mr. Reed also states that there is a need to define and communicate the minimal level of acceptable behavior to the utility with sufficient time for the utility to reasonably meet the defined standard and that Staff provided feedback to MGE that there were no concerns over a course of five years. (Reed rebuttal, p. 10, l. 20 through p. 11, l. 7). Do you agree with Mr. Reed's statements?

A. Staff disagrees with Mr. Reed's statements that feedback from Staff during this time period indicated that MGE planning process utilized for capacity acquisition was adequate. MGE refers to Staff recommendations in Case No. GO-96-243, for MGE Reliability Reports dated June 28, 1996, May 30, 1997 and May 28, 1998. Staff is providing its recommendation in these consolidated cases for the 2001/2002 ACA and the 2002/2003 ACA.

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[2] There is no MGE Reliability Report for 1999/2000. MGE relied on the previous Reliability Report, which is the 1998/1999 Reliability Report.

MGE is responsible for operating its system in a safe and adequate manner. Thus, MGE must conduct long-range supply planning in a reasonable manner and make prudent decisions using the information generated from its planning activities.

It is my understanding that the purchased gas adjustment (PGA)/Actual Cost Adjustment (ACA) component of natural gas bills to MGE's customers is a not just a pass through of documented incurred costs. These costs are audited by the Procurement Analysis Department to assure that the costs passed on to customers are just and reasonable. MGE did not do adequate or reasonable planning to ensure that the costs for capacity on the interstate pipelines that were passed through to customers during the 2001/2002 and 2002/2003 ACA periods were just and reasonable.

In doing these ACA reviews, Staff considers what the Company knew or should have reasonably known when it made its natural gas purchasing decisions. As a natural gas local distribution company (LDC), MGE should not have to be told to do a reasonable analysis and plan to meet its customers' needs for cold day requirements.

A component of the ACA audit process is to examine the reliability of the LDC's gas supply, transportation, and storage capabilities. For this analysis, Staff reviewed MGE's plans and decisions regarding estimated peak-day requirements, the pipeline capacity levels needed to meet those requirements, peak-day reserve margin and the reasons underlying the company's reserve margin, and MGE's natural gas supply plans for various weather conditions. Staff does not conduct a review of the ACA until the period is over.

I have documented in my direct testimony why the MGE method is not reasonable. (The discussion of peak heating degree day begins on page 12, the discussion of Staff's disagreement with MGE's peak day methodology begins on page 19, and the discussion of the imprudent decision for 2001/2002 and 2002/2003 begins on page 29.)

The contract capacity for peak day planning would be concerned with a potential peak cold day in the winter months, not the summer months, and the first winter impacted by MGE's contract changes would have been the 2001/2002 winter. Further, with a new term beginning June 15, 2001 and extending through ** _____________ ** for the Southern Star (SSC)/Williams transportation contracts, it is the 2001/2002 ACA period, an ACA period that begins July 1, 2001, during which customers would first bear the full cost of MGE's contract decision to keep more pipeline capacity than necessary. Additionally, it is not until the 2001/2002 ACA period that MGE indicates that the contracts have changed.

Q. Prior to the 2001/2002 ACA review, did Staff express any concerns with MGE's natural gas planning?

A. Yes. I expressed concerns with MGE's documentation related to its reliability analysis in the consolidated MGE Case Nos. GR-2001-382, GR-2000-425, GR-99-304 and GR-98-167. Staff's reliability documentation issues pertained to GR-2001-382 (2000/2001 ACA) and GR-2000-425 (1999/2000 ACA). In my direct testimony in those consolidated cases, I state:

> In Staff's attempt to evaluate Company decisions for this actual cost adjustment (ACA) period, which must be based on information that was available at the time MGE made its purchasing decisions, Staff has found that the Company analyses was not supported. For example, as noted in my direct testimony, the Company provided Staff with a copy of its *Missouri Gas Energy Reliability Report, July 1, 2000 through June 30, 2001*, dated July 1, 2000. This report provides Staff with information about the Company's plan for providing for customer needs during a peak cold day. The Company states in this report that, "A key consideration in the forecasting process is the firm demand during extreme weather conditions. This information is necessary to allow the Company to ensure adequate supplies and pipeline capacity

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> to meet all of its firm sales obligations under such conditions." When Staff requested a copy of some of the data used in the preparation of this report, the Company stated that this analysis was undertaken in 1994 and cannot be found. This was surprising to me since it was my impression from the review of the Company's reliability report that the Company reviewed usage information on an annual basis. Because the data cannot be found, MGE cannot establish, and Staff cannot confirm, that estimates provided in the Reliability Report are reasonable. Even if the 1994 analysis could be found, there is the concern that analysis of data that was at least six-years old prior to the date of this Reliability Report, would not be representative of customer usage for this ACA period.
>
> Another example from this same Reliability Report is that the Company states that a series of regression analyses are performed to determine certain factors used to develop the peak day estimate – customer usage that could be expected on a peak cold day. When Staff examined the information further, these factors used by the Company appear to be based on a review of usage for only one cold day each year, not a series of regression analyses. Staff does not believe that the review of one cold day in each year, a single data point, is sufficient to establish these factors.

Q. Mr. Reed states that Ms. Jenkins used new forecasting techniques and new data that were not available at the time that MGE made its decisions (Reed rebuttal, p. 8, ll. 1-7). Do you agree with Mr. Reed's statement?

A. No. The technique of using regression analysis was not new to MGE. In its 2000/2001 Reliability Report MGE states that a ** ______________________________

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Although the reliability report mentions a series of regression analyses, when Staff attempted to obtain copies of this data for analysis, the Company stated that documentation of this analysis cannot be found. Staff's examination of the information revealed that the heatload factor used by the Company is based on a review of usage for only one cold day each year, not a series of regression analyses. MGE's analysis in the 2001/2002 Reliability Report, dated July 1, 2001, only considers a single data point to estimate heatload. MGE also used a single data point in its 1999/2000 and 2000/2001 ACA reviews. As noted in Staff's recommendation in the prior ACA case, Case No. GR-2001-382, the 2000/2001 ACA review, Staff does not believe that the review of one cold day in each year, a single data point review in each Reliability Report, is sufficient to establish the peak day heat load factor. Also, Staff's analysis considers MGE data for November 1, 1997 through March 31, 2001, data that would have been available for MGE's review, the same period of time in which Mr. Reed selects his 12 data points for his after-the-fact analysis.

On page 8, line 3 of Mr. Reed's rebuttal testimony, he again refers to the 1996 Pony Express decision – the ** ____ **. As previously noted by Staff, the increased capacity on ** ____________________________ _______________ **, must be considered in the total capacity for the 2001/2002 ACA, but Staff does not state that the ** ____ ** decision was imprudent. Staff has not suggested that the decision in 1996 should have been different. My direct testimony refers to MGE's failure to adequately evaluate and document its decision to maintain the Southern Star total transportation contract volumes at the same level. MGE's decision to modify the Southern Star (SSC)/Williams transportation contracts only impacted 16 days of the entire 2000/2001 ACA period that ended June 30, 2001. MGE did not make the changes to the Southern Star contract to impact winter capacity for the 2000/2001 ACA period. With a new term beginning June 15, 2001 and extending through ** ______________ **, it is the 2001/2002 ACA period, an ACA period that begins July 1, 2001, that first bears the full cost of this contract decision.

Q. Mr. Reed states that Ms. Jenkins has implied that her demand estimate is the only factor that is required when making a capacity decision since she does not consider any other factors in her direct testimony that would be important for a LDC to consider when purchasing capacity (Reed rebuttal, p. 10, ll. 13-16). Do you agree with this statement?

A. No. On page 2 of my direct testimony, I state that Staff reviews the reasonableness of the assumptions the company uses for estimating how much natural gas customers may actually use (demand requirements); analyzes the companies' estimating tools; reviews and analyzes transportation capacity, storage, peaking and supply resources utilized by the companies; reviews and analyzes company base load and other gas supply requirements; and reviews and analyzes any reasons the company may have for pipeline capacity levels greater than reasonable estimated peak day requirements. For the MGE analysis, Staff considered each of these items. The analysis also included a review of customer growth, the expiration date of contracts/ acquisition of capacity in chunks (acquisition of blocks of capacity for contracting purposes that do not correspond perfectly with current demand), the carrying costs of excess reserve, the selection of peak cold day, and the flexibility of MGE's contracts/resources.

Additionally, because MGE's contracts for capacity are for multiple years, MGE's capacity planning must look beyond the current year's requirement. MGE has stated that it reviews capacity over longer periods of time to allow for contracting of capacity in blocks. Thus, more reserve is acceptable in the 2001/2002 ACA to allow for a sufficient reserve in the 2005/2006 ACA. Staff considered five-year planning for contracting of capacity as reasonable because the Company has ** ____ ______ **. (Jenkins direct, pp. 28-29) This is consistent with MGE's information provided in its 2001/2002 Reliability Report, dated July 1, 2001, which also looks at future years' estimated peak day demand and capacity needs. Figure I-2 of that report lists the ** ______ **

MGE's 2002/2003 Reliability Report, dated July 1, 2002, also looks at future years estimated peak day demand and capacity needs. Figure I-12 of that report lists the ** ______ **

Staff's consideration of five-year planning for contracting of capacity is not inconsistent with MGE's ** ______ **.

SURREBUTTAL OF REED REBUTTAL – IDENTIFYING PROBLEMS WITH MS. JENKINS PROPOSED DESIGN DAY DEMAND ANALYSIS

Q. Mr. Reed asserts that Staff's approach of calculating design day weather produces an inconsistency in the level of reliability across MGE's service territories.

Specifically, Mr. Reed contends that Staff's review would have MGE plan its capacity portfolio to provide Kansas City and St. Joseph customers with sufficient protection to meet a 1-in-87 year cold event, while customers in Joplin would only be covered for a 1-in-25 year event (Reed rebuttal, p. 13, l. 18 through p. 14, l. 2). Do you agree with Mr. Reed's statement?

A. No. Mr. Reed's selection of heating degree day for a peak cold day only considers the one coldest day in each of the years, 30 data points, and ignores data from winters that have numerous cold days. Staff's selection of the highest observed HDD for each service area, 81.5 HDD for Kansas City and St. Joseph and 72.1 HDD for Joplin, are colder than the 99% confidence interval for the coldest days in those years, 1971/1972 through 2000/2001. My concerns with the MGE methodology and support for my selection of peak heating degree day is explained further in my rebuttal testimony pages 8-11.

Q. Mr. Reed asserts that Ms. Jenkins comparison of MGE's and Staff's design day is irrelevant in this proceeding (Reed rebuttal, p. 14, line 8 through p. 16, line 6). Do you agree with Mr. Reed's statement and his supporting argument?

A. No. Mr. Reed states that MGE's utilization of a different peak cold day (85 HDD) than the peak cold day selected by Staff (81.5 HDD) is irrelevant. His justification is based on his after-the-fact analysis of a peak cold day. I continue to state that a comparison of Staff's peak cold day and MGE's peak cold day, as identified in the 2001/2002 Reliability Report is relevant because the 2001/2002 Reliability Report contains information that MGE relied upon when making decisions for the 2001/2002 ACA period. Additionally, MGE used 85 HDD in its 2000/2001 Reliability Report. As noted in my direct testimony, pp. 18-19, if MGE had used 81.5 HDD in its 2001/2002 Reliability Report, Staff's estimate of peak day demand would be 7.2% less than the Company estimate (instead of 10.9% less). Mr. Reed does not offer support of the methodology MGE used in its 2001/2002 and 2002/2003 reliability reports. Mr. Reed's analysis was conducted in the fall of 2005 (MGE response to Data Request No. 162, Jenkins' rebuttal, Schedule 1).

Additionally, Mr. Reed's after-the-fact analysis, in which he selects heating degree days for the Kansas City and St. Joseph service areas, is based on a review of only the one coldest day in each of the winters of 1971/1972 through 2000/2001, 30 data points, and ignores data from winters that have numerous cold days. My rebuttal testimony, pages 8-23, explains that Mr. Reed's after-the-fact methodology is flawed because of inappropriate selection of peak heating day and limited examination of data.

Q. Mr. Reed states that Staff's approach to calculating baseload demand produced nonsensical results (Reed rebuttal, p. 16, l. 9 through p. 18, l. 6). Do you agree with Mr. Reed's statement and his supporting arguments?

A. No. Mr. Reed's baseload analysis only evaluates the average demand for July and August. Mr. Reed provides no evidence that MGE's daily average demand for July and August is actually representative of MGE's baseload demand in June, September, January or any other month of the year. Moreover, the peak day analysis is concerned with usage on a very cold day in the winter, not the baseload demand in July or August.

Further examination of Mr. Reed's data reveals that the baseload usage is not constant in July or August. Mr. Reed's estimate of baseload for July and August is an average of the daily data for each of the months of July and August for the years of 1998 to 2001. A review of the daily data for this time period, summarized in the Table 3 below, reveals that in July 1999, usage varied from a low of ** ______ ** to a high of ** ______ ** MMBtu/day. In

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August 1998, usage varied from a low of ** ______ ** MMBtu/day to a high of ** ______ ** MMBtu/day.

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Q. Mr. Reed states that Staff has previously reviewed and accepted MGE's approach to calculate baseload. (Reed rebuttal, p. 18, l. 8 through p. 19, l. 6). Do you agree with Mr. Reed's statement and his supporting arguments?

A. No. As stated on pages 12-14 of my surrebuttal, in its 2000/2001 Reliability Report MGE states that a ** ____

____

____

____ **. Although the reliability report mentions a series of regression analyses, when Staff attempted to obtain copies of this data for analysis, the Company stated that this analysis cannot be found.

Staff disagrees with Mr. Reed's statements that feedback from Staff during this time period indicated that MGE planning process utilized for capacity acquisition was adequate.

Mr. Reed refers to the MGE Reliability Reports filed in 1996, 1997 and 1998 and refers to Schedule DNK-5, page 3, of Mr. Kirkland's direct testimony which is the Staff Recommendation for the 1998/1999 ACA review in Case No. GR-99-304. I expressed concerns with MGE's documentation related to its reliability analysis in the consolidated MGE Case Nos. GR-2001-382, GR-2000-425, GR-99-304 and GR-98-167. Staff's reliability documentation issues pertained to Case Nos. GR-2001-382 (2000/2001 ACA) and GR-2000-425 (1999/2000 ACA). Staff is providing its recommendation in these consolidated cases for the 2001/2002 ACA and the 2002/2003 ACA, not the ACA cases of 1998/1999 and earlier.

Additionally, with a new term beginning June 15, 2001, and extending through ** _____________ ** for the Southern Star (SSC)/Williams transportation contract, it is the 2001/2002 ACA period, an ACA period that begins July 1, 2001, that first bears the full cost of MGE's contract decision.

Furthermore, MGE is responsible for operating its system in a safe and adequate manner. This requires the Company to conduct long-range supply planning in a reasonable manner and make prudent decisions using the information generated from this planning activity. Staff does not conduct a review of the ACA until the period is over. It is my understanding that the purchased gas adjustment (PGA)/Actual Cost Adjustment (ACA) component of natural gas bills to MGE's customers is a not just a pass through of documented incurred costs. These costs are audited by the Procurement Analysis Department to assure that the costs passed on to customers are just and reasonable. MGE has not done reasonable planning to assure that the capacity costs incurred by customers during the 2001/2002 ACA period and 2002/2003 ACA period were just and reasonable.

Q. Mr. Reed states that Staff included both warm and cold winter days in its regression analysis as opposed to just winter days most reflective of "design day" conditions and states that this is a fundamental flaw in Staff's regression equation. (Reed rebuttal, p. 19, ll. 9-18.) Do you agree with Mr. Reed's statements and supporting information?

A. No. Staff's analysis considers usage in the winter months of November 1, 1997 to March 31, 2001. The regression analysis outputs provide an estimate of the baseload and the heatload factor (heatload per heating degree day) for the data reviewed. Thus, if a colder day is put in the regression equation, the estimate of the usage would increase. For simplicity, and so as not to reveal highly confidential information, I will illustrate with the following example equation.

Table 4: Example Regression Equation	
y=mx+b where: "y" represents estimated usage in MMBtu/day "m" represents the heatload that varies depending on the temperature or heating degree days "x" represents the heating degree days "b" represents the baseload, or the constant usage during the period being reviewed	
If the regression equation is y = 10 x + 10	
For 45 HDD (average daily temperature of 20 degrees Fahrenheit) the estimated usage would be:	460
For 65 HDD (average daily temperature of zero degrees Fahrenheit) the estimated usage would be:	660

The regression output sheets for the three service areas showed coefficient of determination values, R-Squared values of 0.919, 0.855 and 0.901for the Kansas City, Joplin and St. Joseph service areas, respectively (Jenkins Direct, page 22, ll. 22 to p. 23, ll. 2). The R-squared value is an indication of the interdependence between HDD and estimated usage. A value of zero would indicate no relationship between HDD and estimated usage. A value of one would indicate a perfect relationship between HDD and estimated usage. A higher

R-squared value implies a stronger relationship between HDD and expected usage. Staff considers reasonable data, winter data for both the baseload and heatload estimate, because it is the usage in the winter months that is of concern for a peak day analysis; and this analysis results in R-squared values above 0.9 for the two service areas where the disallowance is proposed. (Jenkins Direct, p. 22, ll. 16 to p. 23, ll. 5).

Mr. Reed does not just include the coldest days in his analysis. Mr. Reed states that he used 12 data points, the three highest demand days that were also within the 10 coldest days for each of the four winters for which data was available at the time of the 2001/2002 period. By choosing to evaluate only 12 data points, Mr. Reed disregards usage on many cold and high usage days.

When compared to the actual usage and heating degree day data for all days in each of these four winters, Mr. Reed's selection of these 12 data points does not make sense. Table 5 lists the 12 data points selected by Mr. Reed. One column in the table lists usage and another column in the table lists heating degree days (HDD).

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Mr. Reed's 12 data points include usage for the top 3 coldest heating degree days during these four winters, and excludes the usage on the 4th and 5th coldest days. Mr. Reed's 12 data points include usage for the 6th and 11th coldest heating degree days during these four winters, and excludes the usage on the 7th through 10th coldest days. Mr. Reed's 12 data points include usage for the 15th and 24th coldest heating degree days during these four winters, and excludes the usage on the 12th through 14th coldest days and 16th through 23rd coldest days. Mr. Reed's 12 data points include usage for the 40th and 45th coldest heating degree days during these four winters, and excludes the usage on the 25th through 39th coldest days and 41st through 44th coldest days. Mr. Reed's 12 data points include usage for the 50th coldest heating degree days during these four winters, and excludes the usage on the 46th through 49th coldest days.

Mr. Reed's 12 data points include usage for the top 3 usage days during these four winters, and excludes the usage on the 4th highest usage day. Mr. Reed's 12 data points includes usage for the 5^{th}, 7^{th} and 8^{th} highest usage days during these four winters, and excludes the usage on the 6th highest usage day. Mr. Reed's 12 data points include usage for the 15th and 30th highest usage days during these four winters, and excludes the usage on the 9^{th} through 14th highest usage days and 16^{th} through 29th highest usage days. Mr. Reed's 12 data points include usage for the 41^{st}, 42^{nd} and 43rd highest usage days during these four winters, and excludes the usage on the 31st through 40th highest usage days. Mr. Reed's 12 data points include usage for the 59^{th} highest usage days during these four winters, and excludes the usage on the 44^{th} through 48th highest usage days.

Mr. Reed provides no rationale for excluding the usage on these many cold and high usage days, other than asserting that these 12 data points are representative of usage on a very cold day. Mr. Reed never supports or justifies his selection of a day with 44.5 HDD (average daily temperature of 20.5 degrees Fahrenheit) because it is "representative", over his exclusion of a day with 58 or 59 HDD (average daily temperature of six degrees Fahrenheit) because it is not representative. This is addressed further in my rebuttal testimony, Jenkins rebuttal pages 18-20.)

Q. Mr. Reed summarizes four of the regression analyses documented in my direct testimony, pages 20 – 23. (Reed rebuttal, p. 20, l. 12, through p. 22, line 2l). Mr. Reed concludes that Ms. Jenkins completely ignored the fundamental problem with all of her proposed regression equations (Reed rebuttal, p. 23 l. 1 through p. 27, l. 2). Do you agree with Mr. Reed's statements and supporting information?

A. No. Regression analysis is a reasonable method to evaluate usage and the results can be used to estimate usage for cold days. In fact, Mr. Reed's own analysis is based on a regression analyses. The peak day estimate MGE relied on when making decisions that impacted the 2001/2002 ACA is reported to be based on a series of regression analysis, but is in reality based on a heatload factor from a review of only a single data point.

Mr. Reed's analysis only utilizes 12 data points, ignoring usage on many cold days. Mr. Reed provides no reasonable explanation for including only 12 data points in his heatload analysis while at the same time ignoring usage on other cold days. For example, Mr. Reed does not offer a plausible explanation of why usage of ** _______ ** MMBtu for 1/23/2000 is included (a day with 44.5 HDD, which is an average daily temperature of 20.5 degrees Fahrenheit), and usage of ** _______ ** MMBtu for 12/18/2000 is not included (a day with 53.0 HDD, which is an average daily temperature of 12 degrees Fahrenheit). Usage on 12/18/2000 is 34% more than usage on 1/23/2000, but is not considered in Mr. Reed's analysis.

Staff also considered other data and methods for estimating usage. Mr. Reed does not comment on those analyses. Staff considered more recent data when evaluating the reserve margin for 2002/2003, simply as a check of the analysis for the 2001/2002 ACA, as explained on page 38, lines 4-16 of my direct testimony. Additionally, in an attempt to look at other reasonable methods for estimating usage requirements, Staff conducted another analysis for usage with HDD of 15 or greater (Jenkins direct, p. 39, l. 5 through p. 41, l. 15). This final review revealed net excess costs to customers for the 2002/2003 ACA period of $1,284,439 to $2,426,474, depending on how the transportation and capacity contracts were structured. (Staff provided three scenarios of how the transportation capacity and storage contracts could have been structured. Jenkins direct, p. 41, ll. 3-15). From this systematic analysis, Staff concluded that since its recommended adjustments of $2,041,931 in

Case No. GR-2002-348 and $2,015,661 in Case No. GR-2003-0330 are within the range considered in these three scenarios, the Staff recommended adjustment is reasonable.

Q. Mr. Reed provides rebuttal Schedule JJR-9 to support his statements about the "fundamental problem" with all of Ms. Jenkins' proposed regression equations (Reed rebuttal, p. 23 l. 1 through p. 28, l. 15, and p. 29, l. 6 through p. 30, l. 20). Do you agree with this representation?

A. No. Mr. Reed only shows the 12 data points that he selected. Additionally, he does not show how MGE's original methodology or his own after-the-fact methodology compares to actual usage.

MGE's factors from its 2001/2002 Reliability Report were for the entire service area. MGE conducted no separate peak day analysis for the service areas of Kansas City, Joplin or St. Joseph when it was evaluating peak day capacity for the 2001/2002 ACA period. Thus, even though the Joplin area is not part of Staff's adjustment and Staff has shown that there is a ** ____ **, it must be included to evaluate how the MGE methodology compares to actual usage.[3]

Using the top 50 usage days for the Kansas City area, provided in the table on page 19 of my rebuttal testimony, and evaluating MGE's estimates, Charts 1 and 2 show that none of the methods perfectly match usage, not MGE's original factors from its 2001/2002 Reliability Report, nor Mr. Reed's estimates.

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[3] Staff cannot show a comparison of MGE's estimated usage in the Kansas City area to the actual usage because MGE's 2001/2002 Reliability Report evaluated usage for the entire service area. MGE conducted no separate peak day analysis for the service areas of Kansas City, Joplin, or St. Joseph when it was evaluating peak day capacity for the 2001/2002 ACA period. Thus, even though the Joplin area is not part of Staff's adjustment and Staff has shown that there is a ** ______________________________ ______________ **, it must be included to evaluate how the MGE methodology compares estimated to actual usage.

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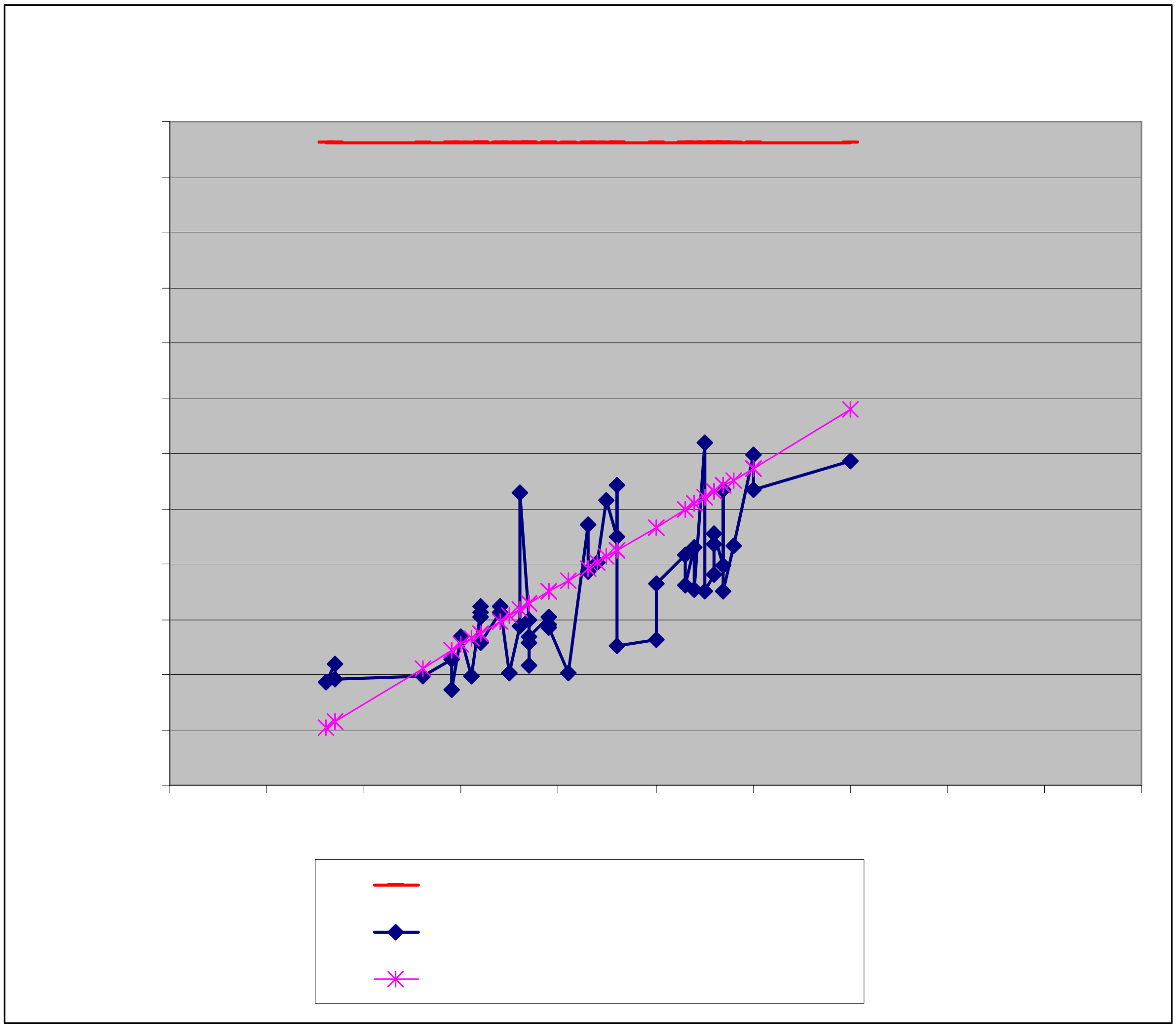

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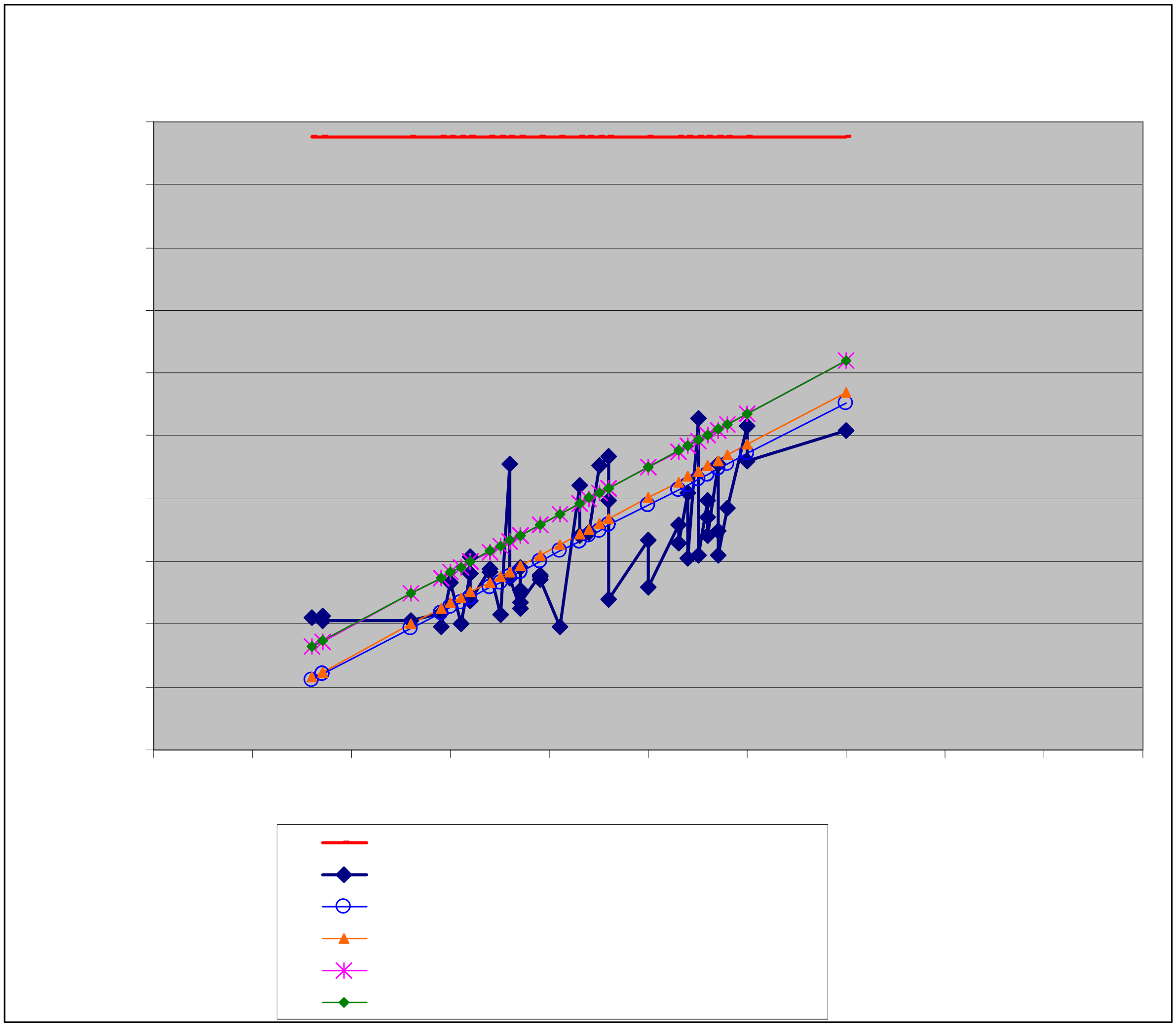

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The plots do illustrate that there is greater variation (difference from the estimated value) on some dates. For these dates, it is appropriate for MGE to further evaluate the data. For example, usage on 12/16/00 is ** _______ ** MMBtu for 48 HDD for the entire system and ** _______ ** for the Kansas City area. None of the methods estimate usage near the actual usage on this date. However, when Staff questioned MGE about actual usage values on various days, MGE's responses indicated that it did not do a forecast for recent cold days[4] (Case No. GR-2003-0330, DR No. 77); calculation of the level of pipeline capacity utilized during any specific winter period's peak day usage is not appropriate to or consistent with providing firm capacity to meet firm customer demand under extreme weather conditions (Case No. GR-2002-348, DR No. 26); and ** ______________________________ ** (Case No. GR-2002-348, DR No. 95). Based on Mr. Reed's logic, would he have MGE obtain additional capacity because this one day with 48 HDD (average daily temperature of 17 degrees Fahrenheit) was over the estimate rather than first questioning whether the usage was correct or whether some other factor impacted usage – something that would not impact usage on a colder day?

On none of these dates was MGE short capacity for the Kansas City area or the entire service area. Customers pay for the contracted capacity whether or not it is used in a particular winter.

SURREBUTTAL OF REED REBUTTAL – REGARDING HIS COMMENTS ON ASYMMETRICAL RISKS ASSOCIATED WITH CAPACITY DECISIONS

Q. Mr. Reed asserts that the design day capacity analysis upon which Ms. Jenkins' capacity disallowance recommendation is based is flawed, and it does not consider numerous other important factors associated with capacity planning, including the substantial costs associated with not having sufficient capacity to meet a design day (Reed rebuttal, p. 3, ll. 14-19 and p. 34, l. 11 through p. 38, l. 8). Do you agree with Mr. Reed's statement and supporting information?

[4] The data request for the 2002/2003 ACA asked MGE to provide for each service area, an updated summary of actual usage actual HDD, and customer counts for five or more recent cold days and provide an explanation when the modeled usage does not reasonably agree with the actual usage. MGE provided information for January and February 2003.

A. There can be costs associated with insufficient capacity. However, the example that he provides for January 3, 1999 is flawed. Once again Mr. Reed does not show how MGE's original methodology or his own after-the-fact methodology compares to actual usage. Additionally, Mr. Reed only looks at one of the methodologies evaluated by Staff. Staff used this methodology to provide a cost estimate of the recommended disallowance. However, as noted in my direct testimony I also considered other data and methods for estimating usage. Mr. Reed does not comment on those analyses.

Staff considered more recent data when evaluating the reserve margin for 2002/2003, simply as a check of the analysis for the 2001/2002 ACA, as explained on page 38, lines 4-16 of my direct testimony. Additionally, in an attempt to look at other reasonable methods for estimating usage requirements, Staff conducted another analysis for usage with HDD of 15 or greater (Jenkins direct, p. 39, l. 5 through p. 41, l. 15).

As described earlier in my surrebuttal testimony, none of the methods perfectly match usage, not MGE's original factors from its 2001/2002 Reliability Report, or Mr. Reed's after-the-fact methodology. The following table shows usage on the January 3, 1999 date selected in Mr. Reed's rebuttal testimony, and usage near that date, using the factors from MGE's 2001/2002 Reliability Report.[5] The table shows that MGE's methodology when applied to January 3, 1999, the date selected by Mr. Reed, also underestimates usage on

[5] Staff cannot show a comparison of MGE's estimated usage in the Kansas City area to the actual usage because MGE's 2001/2002 Reliability Report evaluated usage for the entire service area. MGE conducted no separate peak day analysis for the service areas of Kansas City, Joplin, or St. Joseph when it was evaluating peak day capacity for the 2001/2002 ACA period. Thus, even though the Joplin area is not part of Staff's adjustment and Staff has shown that there is a **______________________________ ______________**, it must be included to evaluate how the MGE methodology compares estimated to actual usage.

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January 3, 1999. For the six dates shown, MGE's methodology underestimates for three dates and overestimates for 6 dates. On one of these dates, the overestimation is 26%.

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The following table is a continuation of Staff's review of the January 3, 1999 date selected in Mr. Reed's rebuttal testimony, and usage near that date. For the six dates shown, Mr. Reed's after-the-fact methodology underestimates for two dates and overestimates for four dates. On one of these dates, Mr. Reed's methodology overestimates by 33%. The coldest day during this time is 65 HDD (average daily temperature of zero degrees Fahrenheit) and neither of Staff's methodologies underestimate usage on that day.

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It is appropriate for MGE to further evaluate the data. This does not mean that MGE should select the 12 data points that it deems reasonable. It means that MGE should question the validity of the data and it should reasonably evaluate the data prior to making transportation capacity decisions.

<u>SURREBUTTAL OF KIRKLAND REBUTTAL REGARDING TIME LINE AND KEY EVENTS</u>

Q. Mr. Kirkland asserts that Staff's rationale for the adjustment in these consolidated cases is based on decisions made by MGE in 1996 and in June 2001. Thus, Mr. Kirkland concludes that an adjustment in the 2001/2002 and 2002/2003 ACA periods is not appropriate. (Kirkland rebuttal, p.5, line 19 to p. 8, line 17) Do you agree with Mr. Kirkland's assertion, conclusion and his supporting arguments?

A. No. Mr. Reed made similar comments in his rebuttal testimony. I have already addressed this issue in my Surrebuttal of Mr. Reed's comments, pages 4 – 9. In summary, Staff's direct testimony considers the increased capacity on ** ______________ ______________________________ **, as this increase must be considered in the total capacity for the 2001/2002 ACA, but Staff does not state that the ** ____________________________ ______________ ** decision was imprudent. MGE failed to reasonably evaluate usage data for peak day requirements and evaluate options for capacity prior to making its decision to maintain the Southern Star total transportation contract volumes at the same level. The decisions regarding the consolidation and extension of the Southern Star contracts should not disregard changes that MGE previously made to other transportation contracts.

Staff's review for the 2001/2002 ACA period revealed that MGE modified Southern Star (SSC)/Williams transportation contracts with a new term beginning June 15, 2001 and extending through ** ______________ **. It is not until the 2001/2002 ACA period that MGE indicates that the contracts have changed. The contract capacity for peak day planning would be concerned with a potential peak cold day in the winter months, not the summer months, and the first winter impacted by MGE's contract changes would have been the 2001/2002 winter. MGE's decision regarding the Southern Star (SSC)/Williams transportation contracts only impacted 16 days of the 2000/2001 ACA period that ended June 30, 2001. The winter of 2000/2001 was not impacted by this contract change in June 2001. With a new term beginning June 15, 2001 and extending through ** ______________ **, it is the 2001/2002 ACA period, an ACA period that begins July 1, 2001, that first bears the full cost of this contract decision. It is not only the date the decision is made that is important in evaluating prudence issues but the costs (damages) to customers that are incurred as a result of MGE' imprudent decision making. In fact, it is possible that the financial consequence of MGE's decisions may occur years after the decision is first made.

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Q. Mr. Kirkland states that pipeline capacity decisions are based on numerous factors and considerations, all of which are evaluated and considered before the capacity is contracted (Kirkland rebuttal, p.9, ll., 1-7) Do you agree with this statement?

A. Yes, pipeline capacity decisions should be based on numerous factors and considerations and should be evaluated and considered prior to making contracting decisions. Additionally, MGE is responsible for operating its system in a safe and adequate manner. This requires the Company to conduct long-range supply planning in a reasonable manner and make prudent decisions using the information generated from this planning activity.

MGE has not done reasonable planning to assure that the capacity costs incurred by customers during the 2001/2002 ACA period and 2002/2003 ACA period are just and reasonable. I have documented in my direct testimony why the MGE method is not reasonable. (The discussion of peak heating degree day begins on page 12, the discussion of Staff's disagreement with MGE's peak day methodology begins on page 19, and the discussion of the imprudent decision for 2001/2002 and 2002/2003 begins on page 29.)

A peak day capacity review should have been conducted prior to making the decision to maintain the same overall capacity level, a decision that impacts costs for the 2001/2002 ACA period and that will continue to impact the capacity level through ** _________ ____ **.

Staff's analysis considers MGE data for November 1, 1997 through March 31, 2001. MGE's analysis in the 2001/2002 Reliability Report, dated July 1, 2001, only considers a single data point to estimate heatload. MGE also used a single data point in its 1999/2000 and 2000/2001 ACA reviews. As noted in Staff's recommendation in the 2001/2002 ACA case, Case No. GR-2002-348, and in the prior ACA case, Case No. GR-2001-382, Staff does not believe that the review of one cold day, a single data point reviewed in each Reliability Report, is sufficient to establish the peak day heat load factor.

Q. Mr. Kirkland refers to several occasions in which Staff found MGE's process and planning to be "adequate" or that "no concerns were noted at this time" based on Staff's reviews of prior MGE Reliability Reports. (Kirkland rebuttal, p.9, l. 9 through p. 10, l. 34 and p. 18, l. 19 through p. 25, l. 20 and p. 27, l. 14 through p. 31, l. 2.) Do you have anything to add to Mr. Kirkland's rebuttal testimony?

A. Yes. Mr. Kirkland and Mr. Reed make similar comments in their rebuttal testimony. I addressed this issue in my Surrebuttal of Mr. Reed's comments, pages 10– 13. I will address additional comments added by Mr. Kirkland.

Mr. Kirkland refers to Staff recommendations with the following dates:

- June 28, 1996 (for MGE's 1996/1997 Reliability Report), attached as Schedule 4 to my rebuttal testimony;
- May 30, 1997 (for MGE's 1997/1998 Reliability Report), attached to Mr. Kirkland's direct testimony, Schedule DNK-3, and
- May 28, 1998 (again for MGE's 1997/1998 Reliability Report) attached to Mr. Kirkland's direct testimony, Schedule DNK-4.

Mr. Kirkland's rebuttal testimony states that the May 28, 1998 Staff recommendation is for MGE's 1998 Reliability Report and he includes a copy of the 1998/1999 Reliability Report in his direct testimony, Schedule DNK-4. However, a review of the Staff Recommendation in his schedule shows that it is for the 1997/1998 Reliability Report. I do not know why Staff provided two different recommendations for the 1997/1998 MGE Reliability Report.

It should be noted that Staff is providing its recommendation in these consolidated cases for the 2001/2002 ACA and the 2002/2003 ACA, not for MGE's 1996/1997 or 1997/1998 ACA periods. However, I will generally address the Staff recommendations for the 1996/1997 and 1997/1998 Reliability Reports. The three Staff recommendations for the 1996/1997 and 1997/1998 MGE Reliability Reports followed similar formats. The recommendations list each section of the MGE Reliability Report. The Staff Response is listed as "Adequate" for each section of the report. The Staff memorandum dated June 28, 1996, states that Staff reviewed the July 1, 1996 through June 30, 1997 MGE Reliability Report. However, I do not know exactly what detail the Staff reviewing these recommendations were able to undertake. My workload and priorities change each year, subsequently altering on a case by case basis the amount of time I have to review any single case. The complexity of the issues requiring attention and the level of detail that I am able to obtain from the utility also affects my workload and priorities. For the 1996/1997 and 1997/1998 Reliability Reports, I do not know whether the Staff reviewed the information generally to simply assure that each section was addressed or whether the Staff conducted a detailed analysis to verify some or all the numbers in the MGE Reliability Reports.

The three Staff recommendations for the 1996/1997 and 1997/1998 MGE Reliability Reports do not state or imply that an MGE must never reexamine, change or refine its methodology. In fact in the 1998/1999 Reliability Report, MGE did change its methodology. This is detailed on pages 16 and 17 of my rebuttal testimony. It is in this 1998/1999 report that MGE states that a ** ____

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____ **. MGE provided similar information in its 2000/2001 Reliability Report, dated July 1, 2000 and its 2001/2002 Reliability Report, dated July 1, 2001. In both the 2000/2001 ACA and 2001/2002 ACA, Case Nos. GR-2001-382 and GR-2002-348, Staff's ACA recommendation noted concerns with MGE's reliability planning. Staff also noted that although the MGE Reliability Reports state that a series of regression analyses are performed on the historic daily firm sales to determine the base load and weather sensitive heat load factors, when Staff attempted to obtain copies of this data for analysis, the Company stated that this analysis could not be found. As noted on pages 12-14 of my surrebuttal, Staff discovered that MGE's heatload factor is actually based on a review of usage for only one cold day each year, not a series of regression analyses. Staff does not believe that the review of one cold day in each year, a single data point review in each Reliability Report, is sufficient to establish the peak day heat load factor.

Mr. Kirkland refers to Staff recommendations dated August 1, 2000 for the MGE 1998/1999 ACA (Kirkland rebuttal, p. 10, ll 25-26). He states that Staff's recommendation was that it had no concerns with MGE's reliability analysis and recommended that MGE continue to provide reliability reports as agreed in Case No. GO-2000-705. I can comment on that Staff recommendation, because I am the Staff member that provided the analysis in that ACA period. My analysis of the ten LDCs in the 1998/1999 ACA reviews were conducted during my first year of employment at the PSC. As noted in my response to MGE in GR-2003-0330, Data Request No. 216, my reviews have evolved over time as my knowledge of LDC practices has increased and as an LDC's documentation and methodology has changed. When first employed at the PSC, I spent much time reviewing the general plans, or lack of plans, of each LDC, and in some cases reviewing an LDC's plans that varied depending on the particular service area. My review and comments of the 1998/1999 ACA reviews concentrated on the general plan or lack of a plan. In the next two ACA periods, 1999/2000 and 2000/2001, I expressed concerns with MGE's documentation related to its reliability analysis in the consolidated MGE Case Nos. GR-2001-382, GR-2000-425, GR-99-304 and GR-98-167. Staff's reliability documentation issues pertained to Case No. GR-2001-382 (2000/2001 ACA) and GR-2000-425 (1999/2000 ACA). As noted above, I subsequently requested additional verification of MGE's statements in its 2000/2001 Reliability Report and MGE was unable to find the supporting information. I subsequently had to evaluate MGE's gas supply/reliability plans by conducting my own analysis as presented in testimony in these consolidated cases.

Q. Mr. Kirkland states that initial contract discussions between MGE and Southern Star began in the fall of 2000. He further states that in the spring of 2001 MGE and Southern Star finalized contract discussions and the contract was executed July 1, 2001. (Kirkland rebuttal, p.11, ll. 4 - 7) Do you have anything to add to Mr. Kirkland's statements?

A. Yes. MGE is responsible for operating its system in a safe and adequate manner. Information that was available prior to June 2001 should have been considered prior to MGE's final decision to renew and consolidate MGE's Southern Star contracts. A peak day capacity review should have been conducted prior to making the decision to maintain the same overall capacity level, a decision that impacts costs for the 2001/2002 ACA period and that will continue to impact the capacity level through ** ______________ **. Staff's analysis considers MGE data for November 1, 1997 through March 31, 2001. MGE's analysis in the 2001/2002 Reliability Report, dated July 1, 2001, only considers a single data point to estimate heatload. MGE also used a single data point in its 1999/2000 and

2000/2001 ACA reviews. As noted in Staff's recommendation in the 2001/2002 ACA case, Case No. GR-2002-348, and in the prior ACA case, Case No. GR-2001-382, Staff does not believe that the review of one cold day, a single data point review in each Reliability Report, is sufficient to establish the peak day heat load factor.

Q. Mr. Kirkland comments on the Stipulation and Agreement in Case No. GO-2000-075. He states that there is an inconsistency in that the same level of capacity that was used as the benchmark for the determination of transportation savings to be shared between MGE and its customer is now alleged by the Staff to be excessive. (Kirkland rebuttal, p. 26, l. 5 through p. 27, l. 5) Do you have anything to add to Mr. Kirkland's statements?

A. Yes. The Stipulation and Agreement in that case was filed April 28, 2000. The GO-2000-705 case pertained to a fixed commodity price PGA and transportation discount incentive program. The Stipulation and Agreement was filed just prior to the 2000/2001 ACA period. Staff did note concerns with MGE's reliability planning in the 2000/2001 ACA, Case No. GR-2001-382. The Staff ACA recommendation and testimony have previously been filed in that case. The ACA periods under review in this case are the 2001/2002 ACA (July 2001- June 2002) and the 2002/2003 ACA (July 2002- June 2003).

Q. Mr. Kirkland states that my direct testimony either ignores or dismisses the benefits associated with MGE's capacity portfolio and focuses exclusively on the costs associated with capacity alleged not to be needed. (Kirkland rebuttal, p. 31, ll. 8-10.) Do you agree with this statement?

A. Partially. Mr. Kirkland refers to the benefits on pages 19 through 23 of his direct testimony. The benefits listed on page 19 are general benefits of MGE's entire capacity portfolio. MGE's total capacity is ** _______ ** MMBtu/day. The proposed disallowance is ** ______ ** MMBtu/day. Mr. Kirkland has provided no evidence that Staff's proposed disallowance would in any way detract from the general benefits listed on page 19 of his direct testimony.

The benefits listed on pages 20 through 23 of Mr. Kirkland's direct testimony pertain to capacity release revenues, off-system sales and transportation discounts. Please refer to my response to Mr. Kirkland's capacity release comments in my rebuttal testimony (p. 29, l. 15 to p. 31, l. 7). Please refer to my response to Mr. Kirkland's off-system sales comments in my rebuttal testimony (p. 31, ll. 8-13). Please refer to my response to Mr. Kirkland's transportation discount comments in my rebuttal testimony (p. 31, l. 14 to p. 32, l. 4). My rebuttal testimony notes that part of the MGE transportation discounts were associated with Gas Research Institute (GRI) charges and Staff has made no adjustment in either the 2001/2002 or 2002/2003 ACA related to GRI charges. The Williams Gas Pipeline Central (Williams)[6], FERC Tariff, issued March 6, 1998, effective April 6, 1998, states, "The GRI Funding Unit(s) shall be the first component discounted when Williams grants a discount under any rate schedule." I inquired as to when MGE first requested the GRI Funding Unit(s) discount, and MGE replied that it first requested the GRI discount on May 14, 2001 to be effective January 1, 2001. (MGE response to data request No. 208, attached as Schedule 2) Although the discount was first referenced in the tariff effective April 6, 1998, MGE did not request the discount until May 14, 2001. The Stipulations and Agreement in Case No. GO-2000-075 was filed April 28, 2000 and the Commission Order Approving Stipulation and Agreement was issued August 1, 2000, and effective August 11, 2000.

[6] Williams Gas Pipeline Central (Williams) and Southern Star Central (Southern Star or SSC) are the same pipelines.

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Regardless of the timing of the FERC tariff reference to GRI discounts and the MGE request for the discount, Staff has made no adjustment in either the 2001/2002 or 2002/2003 ACA related to GRI charges.

SURREBUTTAL OF KIRKLAND REBUTTAL REGARDING TRANSPORTATION CAPACITY PORTFOLIO

Q. Mr. Kirkland states that Ms. Jenkins does not appear to consider the broader context of capacity planning issues/objectives but rather focuses exclusively on the demand forecasting process (Kirkland rebuttal, p. 33, ll. 3-4). Do you agree with this comment?

A. No. Mr. Kirkland and Mr. Reed make similar comments in their rebuttal testimonies. I addressed this issue in my Surrebuttal of Mr. Reed's comments, pages 14 – 16. I will address additional comments added by Mr. Kirkland.

The Staff recommendation in the 2000/2001 ACA, Case No. GR-2001-382, expresses concerns regarding MGE's storage plans and purchasing practices. Staff also expressed concerns regarding MGE's storage plans in these consolidated cases.

MGE's total capacity is ** ______ ** MMBtu/day. The proposed disallowance is ** ______ ** MMBtu/day. Mr. Kirkland has provided no evidence that Staff's proposed disallowance would in any way detract from the supply reliability issues listed on page 32 of his rebuttal testimony.

Q. Mr. Kirkland states that Ms. Jenkins has focused almost exclusively on a narrow five-year comparison of her alternative demand forecast to the level of MGE's contracted capacity. (Kirkland rebuttal, p. 33, ll. 8-9). Do you have any comments regarding this statement?

NP

A. Yes. Mr. Kirkland and Mr. Reed make similar comments in their rebuttal testimonies. I addressed this issue in my surrebuttal of Mr. Reed's comments, pages 15 – 16. In summary, Staff's consideration of five-year planning for contracting of capacity is not inconsistent with MGE's ** __________________________ ** presented in its 2001/2002 and 2002/2003 Reliability Reports.

<u>SURREBUTTAL OF KIRKLAND REBUTTAL REGARDING SOUTHERN STAR CONTRACT RENEWAL</u>

Q. Mr. Kirkland makes comments about the new Southern Star contract with its no-notice service and the advantages of that contract. (Reed rebuttal, p. 36, ll. 11-21). Is this a new service for MGE?

A. No. Although MGE's Southern Star contracts were effective June 15, 2001, MGE had a no-notice service prior to 2001/2002. The contract decision consolidated several other Southern Star contracts. A summary of the Southern Star capacity for the two ACA periods is presented in the table below.

<u>Highly Confidential In Its Entirety</u>

**

**

There is an increase of ** ____ ** for the no-notice service, but the total capacity on Southern Star does not change. The difference is that in the 2000/2001 winter, MGE would have had to nominate gas on the ** ___________ **. It is not unreasonable to expect an LDC to nominate additional natural gas when the weather turns cold.

As noted in my rebuttal testimony, Staff does not dispute Mr. Kirkland's statements that the Trans-Storage Service (TSS) contract has greater flexibility in that it has no-notice provisions, but MGE also has another ** ____ ____. ** Staff evaluated how MGE might have structured its contracts differently (Jenkins direct, p. 31, ll. 14 to p. 34, ll. 7). This analysis shows that natural gas from storage can be used to meet ** _____ ** of the peak day requirements using the MGE plan and ** _____________ ** in the three scenarios evaluated by Staff. Thus, for an extremely cold day, storage withdrawals could be relied upon to provide about ** ____ ** of the supply requirements, but there is still a large portion of the supply requirements that must come from non-storage resources; this is the case in both the MGE plan and in the three scenarios considered by Staff.

Q. Mr. Kirkland makes comments about my direct testimony regarding the inability of MGE to utilize capacity assigned to one region in another region. He states that Southern Star has advised MGE that there is no additional capacity available at this time in Southwest Missouri and that capacity may be limited by line segment value during an Operation Flow Order (OFO) issued by a pipeline. Mr. Kirkland clarifies that this does not mean that capacity from one region can never be used in another region. (Kirkland rebuttal, p. 37, ll. 1 to p. 39, ll. 3) Do you agree with this clarification?

NP

A. Yes. However, Staff was making the point that excess capacity in the Kansas City and St. Joseph service areas cannot be relied on to offset the ** ____________________ ____________________ ** Because of the potential for a pipeline OFO, MGE cannot simply rely on shifting capacity from one service area to another area during cold weather. The capacity requirements of each service area must be evaluated separately.

Q. Mr. Kirkland makes comments regarding the alternative capacity scenarios identified on pages 32 and 33 of my direct testimony. Mr. Kirkland states that my alternatives are speculative and unreasonable. (Kirkland rebuttal, p. 40, ll. 1 to p. 41, ll. 11) Do you agree with Mr. Kirkland's statements and supporting arguments?

A. No. Although it is true we will never know exactly how MGE could have restructured its contracts had it done reasonable planning of its customers' usage requirements prior to making contract decisions, the cost (damages from the imprudent decision) had to be evaluated by Staff. Thus, Staff made reasonable assumptions regarding alternatives that MGE could have pursued. MGE's unreasonable planning did not identify the excess capacity issue and MGE has offered no alternatives for consideration.

Mr. Kirkland comments that Staff's scenarios would require MGE to turn back storage capacity. As noted in my direct testimony there is little change in total storage quantity for the three scenarios that I have evaluated. The reduction in the total storage quantity would be a reduction of 2.6%, 2.9%, and 0.0%, respectively for scenarios one, two, and three. The reduction in the daily maximum storage withdrawal quantity would be a reduction of 2.7%, 3.1%, and 0.0%, respectively for scenarios one, two, and three. MGE's actual 2001/2002 storage withdrawal could provide ** _____ ** of peak day requirements.

There is little change in the scenarios I propose; storage withdrawal could provide ** ______ _______________ ** of peak day requirements, respectively for scenarios one, two and three.

Q. Mr. Kirkland states that Ms. Jenkins has assumed that MGE can easily reduce capacity on Southern Star in one-year and easily and cheaply reacquire capacity on the same pipeline several years later in order to more closely match capacity with actual demand. (Kirkland rebuttal, p. 41, ll. 13 to page 42, ll. 7). Do you have comments regarding this statement?

A. Yes. As previously noted on pages 15 – 16 of my surrebuttal, my consideration of five-year planning for contracting of capacity is not inconsistent with MGE's ** three-year and four-year ** timing presented in its 2001/2002 and 2002/2003 Reliability Reports. Additionally, in its 2001/2002 Reliability Report MGE states, ** ______

____

____

**

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

JENKINS SCHEDULE 1
DEEMED

HIGHLY CONFIDENTIAL IN ITS ENTIRETY

JENKINS SCHEDULE 2-2
DEEMED HIGHLY CONFIDENTIAL

Missouri Public Service Commission

Respond Data Request

Data Request No.	0208
Company Name	Missouri Gas Energy-(Gas)
Case/Tracking No.	GR-2003-0330
Date Requested	5/2/2006
Issue	Expense - Operations - Purchased Gas
Requested From	Mike Noack
Requested By	Lesa Jenkins
Brief Description	Pipeline Discounts
Description	Please see attached request.
Response	(a) MGE first requested the GRI discount on May 14, 2001 to be effective January 1, 2001. (b) & (c) Please see attached discount requests. (d) Please see attached discount requests. (e) Please see letter dates for attachments in part (d).
Objections	NA

The attached information provided to **Missouri Public Service Commission** Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the **Missouri Public Service Commission** if, during the pendency of Case No. **GR-2003-0330** before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information. If these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the **Missouri Gas Energy-(Gas)** office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g. book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title number, author, date of publication and publisher, addresses, date written, and the name and address of the person (s) having possession of the document. As used in this data request the term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronoun "you" or "your" refers to **Missouri Gas Energy-(Gas)** and its employees, contractors, agents or others employed by or acting in its behalf.

Security :	Public
Rationale :	NA

With Proprietary and Highly Confidential Data Requests a Protective Order must be on file.

Schedule 2

Williams

GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

May 14, 2001

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA0624
Rate Schedule:	FTS-M
Time Period:	January 1, 2001 through June ~~30~~ 15, 2001
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By H. Dean Jones II
Vice President

AGREED TO AND ACCEPTED this 18th day of May, 2001.

MISSOURI GAS ENERGY

By ____________________

Title Vice President

LEGAL APPROVAL

GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

May 14, 2001

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA0628
Rate Schedule:	FTS-M
Time Period:	January 1, 2001 through June ~~30~~ 15, 2001
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By H. Dean Jones II
Vice President

AGREED TO AND ACCEPTED this 18th day of May, 2001.

MISSOURI GAS ENERGY

By ______________________

Title Vice President

LEGAL APPROVAL

Williams

GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

May 14, 2001

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA0631
Rate Schedule:	FTS-M
Time Period:	January 1, 2001 through June ~~30~~ 15, 2001
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By ______________ II
Vice President

AGREED TO AND ACCEPTED this 18th day of May, 2001.

MISSOURI GAS ENERGY

By ______________

Title Vice President

Williams
GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

May 14, 2001

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA0635
Rate Schedule:	FTS-P/M
Time Period:	January 1, 2001 through June ~~30~~ 15, 2001
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By H. Dean Jones II
Vice President

AGREED TO AND ACCEPTED this 18th day of May, 2001.

MISSOURI GAS ENERGY

By

Title Vice President

Williams

GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

May 14, 2001

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA0808
Rate Schedule:	FTS-P/M
Time Period:	January 1, 2001 through June ~~30~~ 15, 2001 DJW
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By H. Dean Jones II
Vice President

AGREED TO AND ACCEPTED this 18th day of May, 2001.

MISSOURI GAS ENERGY

By [signature]

Title Vice President

LEGAL
OW

Williams.

GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

May 14, 2001

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA0630
Rate Schedule:	FTS-P
Time Period:	January 1, 2001 through October 1, 2002
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By H. Dean Jones II
Vice President

AGREED TO AND ACCEPTED this 18th day of May, 2001.

MISSOURI GAS ENERGY

By ______________________

Title Vice President

LEGAL APPROVAL
[illegible]

Williams.

GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

May 14, 2001

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA0637
Rate Schedule:	FTS-P
Time Period:	January 1, 2001 through October 1, 2002
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By H. Dean Jones II
Vice President

AGREED TO AND ACCEPTED this 18th day of May, 2001.

MISSOURI GAS ENERGY

By ______

Title Vice President

LEGAL APPROVAL

Williams

GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

May 14, 2001

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA0955
Rate Schedule:	FTS-P
Time Period:	January 1, 2001 through October 1, 2002
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By H. Dean Jones II
Vice President

AGREED TO AND ACCEPTED this 18th day of May, 2001.

MISSOURI GAS ENERGY

By ______________

Title Vice President

Williams.

GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

May 14, 2001

06-22-01A11:25 RCVD

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA0954
Rate Schedule:	FTS-P
Time Period:	January 1, 2001 through October 1, 2002
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By H. Dean Jones II
Vice President

AGREED TO AND ACCEPTED this 18th day of May, 2001.

MISSOURI GAS ENERGY

By ______

Title Vice President

LEGAL APPROVAL
CCU

Williams

GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

May 14, 2001

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA0926
Rate Schedule:	FTS-P
Time Period:	January 1, 2001 through October 1, 2002
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By H. Dean Jones II
Vice President

AGREED TO AND ACCEPTED this 18th day of May, 2001.

MISSOURI GAS ENERGY

By ____________________

Title Vice President

LEGAL APPROVAL

Williams

GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

May 14, 2001

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA0927
Rate Schedule:	FTS-P
Time Period:	January 1, 2001 through October 1, 2002
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By H. Dean Jones II
Vice President

AGREED TO AND ACCEPTED this 18th day of May, 2001.

MISSOURI GAS ENERGY

By

Title Vice President

LEGAL

Williams

GAS PIPELINE
Central
P.O. Box 20008
3800 Frederica St.
Owensboro, Kentucky 42304
270/926-8686

June 15, 2001

Mr. Michael T. Langston
Vice President, Gas Supply
Missouri Gas Energy
504 Lavaca, Suite 800
Austin, Texas 78701

Dear Michael:

Williams Gas Pipeline Central, Inc. (Central) has reviewed Missouri Gas Energy's (MGE) request for a discounted transportation rate for the time period listed below. Accordingly, Central is willing to offer MGE the following:

Contract No.:	TA8249
Rate Schedule:	TSS
Time Period:	June 15, 2001 through October 1, 2002
Rate:	Central will forgo its right to charge and collect the demand and commodity GRI surcharges.

If MGE is agreeable to this discount, please sign and return this original Letter Agreement to Central to indicate your acceptance of this discount. The above discount will become null and void if changes are made to this original Letter Agreement.

Very truly yours,

WILLIAMS GAS PIPELINE CENTRAL, INC.

By Kim R Cocklin
Sr. Vice President + Gen. Mgr.

AGREED TO AND ACCEPTED this 15 day of June, 2001.

MISSOURI GAS ENERGY

By [signature]

Title Vice President

LEGAL APPROVAL

KINDER MORGAN
ENERGY PARTNERS, L.P.
Kinder Morgan Interstate Gas Transmission LLC

370 Van Gordon Street
P.O. Box 281304
Lakewood, CO 80228-8304
(303) 989-1740

February 28, 2000

Missouri Gas Energy
Mr. Michael T. Langston
Vice President, Gas Supply
504 Lavaca, Suite 800
Austin, TX 78701

Dear Mr. Langston,

By this letter agreement, Missouri Gas Energy (MGE), a division of Southern Union Company, and Kinder Morgan Interstate Gas Transmission LLC (KMIGT) agree to the terms for discounted transportation service under MGE's FT Service Agreement designated as contract FT-00570 as described below. This letter agreement supersedes any prior discount letter agreement, including the November 26, 1996 letter agreement, as of August 1, 1998.

- Term: Effective August 1, 1998 through September 30, 2012.
- Receipt Point: Interconnect with Panhandle Eastern Pipe Line Company (PEPL) located in Miami County, Kansas, (i.e., PIN 9673 – PEPL/KNI-PXP Miami).
- Delivery Point: Interconnect with MGE's distribution system near 107th and Elm in Kansas City, Missouri, (i.e., PIN 9704 – MGE/KNI – Jackson).
- Reservation Rate: $3.5003 per MMBtu per month inclusive of any GRI demand rate.
- Commodity Rate: Per KMIGT's tariff plus applicable ACA commodity charge.
- No other surcharges, fees, expenses, or other costs may be charged under this Agreement.
- Fuel – will be charged per KMIGT's Tariff.
- Maximum Daily Transportation Quantity:
  35,000 MMBtu/d effective October 1, 1997 through September 30, 2001
  50,000 MMBtu/d effective October 1, 2001 through September 30, 2012
- Scope of Agreement:
  Availability of the agreed-to discounted rates is limited to the receipt and delivery point described above. Utilization of receipt or delivery points other than those specified above, either directly by MGE or by a replacement Shipper utilizing capacity released by MGE, shall result in the inapplicability of the discount provided herein for the month in which the transaction occurred.

If the terms of this amended agreement are acceptable, please sign below and return one fully executed copy for our files by March 6, 2000.

Sincerely,

Mike Crisman RMH
Vice President,
Business Management and Development

Accepted this 3rd day of MARCH, 2000

By: ______________________
Michael T. Langston
Vice President, Gas Supply

LEGAL APPROVAL
PBB

MGE MISSOURI GAS ENERGY
504 Lavaca, Suite 800 • Austin, Texas • 78701 • (512) 477-5852

March 17, 2000

Mr. Gregg E. Russell
CMS Panhandle Eastern Pipe Line Company
5444 Westheimer Road
Houston, TX 77056-5306

RE: Transportation and Storage Services Renewal and/or Replacement

Dear Gregg:

Missouri Gas Energy (MGE) hereby submits the following discounted transportation and storage proposal to CMS Panhandle Eastern Pipe Line Company (PEPL) for its consideration.

1. Existing EFT Contract 12622 ✓

a. Would be terminated effective September 30, 2000, subject to the execution of two new EFT contracts outlined in Part 2 and Part 4 below.

2. A new EFT Contract would be originated #017071 6T30176 ✓

a. The term will be October 1, 2000 through September 30, 2005.
b. The new EFT Contract would have a Maximum Daily Contract Quantity ("MDCQ") of 27,880 Dth.
c. The primary receipt point for 10,000 mmbtu would be designated as LIGHT, Light Demarcation..
d. The primary receipt point for another 17,880 mmbtu would be designated as 6204, CIG-PEPL Interconnect.
e. The secondary receipt point would be designated as FLD FS.
f. The primary delivery point would be designated as MGEMO.
   i) Warrensburg, the new delivery point to be constructed that is described below, will be a part of the MGEMO primary delivery point.
g. PNYEX would be designated as a secondary delivery point.
h. FLD FS Storage would be designated as secondary delivery point.
i. The service basis would be annual, 365 days per year.
j. The Annual Reservation Charge Amount ("ARCA") would be $2,086,121 inclusive of the Transmission Field Reservation Charge, the Transmission Market Access Reservation Charge, the Transmission Mileage Reservation Charge, the GRI Reservation Load Factor Surcharge and any new reservation charges and/or surcharges that PEPL may have approved during the term of this agreement. It is exclusive of the Transmission Field Commodity Charge, the Transmission Market

Commodity Charge, the Transmission Mileage Commodity Charge, the GRI-Commodity Surcharge and the ACA Commodity Surcharge, as well as the applicable PEPL Fuel Reimbursement Charges.

3. Existing EFT Contract 12623

a. Would be terminated effective September 30, 2000, subject to the execution of two new EFT contracts outlined in Part 2 above and Part 4 below.

4. A new EFT Contract would be originated #017072 CT30177

a. The term will be November 1, 2000 through March 31, 2005.
b. The new EFT Contract would have an MDCQ of 10,000 Dth.
c. The primary receipt point would be designated as 41296, Mouser Mobil.
d. The secondary receipt point would be designated as FLD FS.
e. The primary delivery point would be designated as MGEMO.
   i) Warrensburg, the new delivery point to be constructed that is described below, will be a part of the MGEMO primary delivery point.
f. PNYEX would be designated as a secondary delivery point.
g. FLD FS Storage would be designated as secondary delivery point.
h. The service basis would be winter, November through March.
i. The annual ARCA would be $377,500 inclusive of the Transmission Field Reservation Charge, the Transmission Market Access Reservation Charge, the Transmission Mileage Reservation Charge, the GRI Reservation Load Factor Surcharge and any new reservation charges and/or surcharges that PEPL may have approved during the term of this agreement. It is exclusive of the Transmission Field Commodity Charge, the Transmission Market Commodity Charge, the Transmission Mileage Commodity Charge, the GRI-Commodity Surcharge and the ACA Commodity Surcharge, as well as the applicable PEPL Fuel Reimbursement Charges.

5. Existing EFT Contract 12624 would be amended

a. The existing termination date would be eliminated and replaced with a new termination date of March 31, 2005.
b. The existing (April through October) transport rights of 4,911 Dth/day for injections into storage:
   i) Would be terminated effective September 30, 2000.
   ii) Injections would be effected by utilizing capacity on one, or both of the new field zone EFT contracts with MDCQ's of 27, 880 Dth/day and 10,000 Dth/day respectively.
c. The existing (November through March) transport rights of 8,987 Dth/day from storage to market:
   i) Would remain intact as a stand-alone agreement.
   ii) The primary receipt point would be designated as FLD FS.
   iii) The primary delivery point would be designated as MGEMO.
      (1) Warrensburg, the new delivery point to be constructed that is described below, will be a part of the MGEMO primary delivery point.
   iv) PNYEX would be designated as a secondary delivery point.

v) FLD FS Storage would be designated as secondary delivery point.
vi) The annual ARCA would be $221,197 inclusive of the Transmission Field Reservation Charge, the Transmission Market Access Reservation Charge, the Transmission Mileage Reservation Charge, the GRI Reservation Load Factor Surcharge and any new reservation charges and/or surcharges that PEPL may have approved during the term of this agreement. It is exclusive of the Transmission Field Commodity Charge, the Transmission Market Commodity Charge, the Transmission Mileage Commodity Charge, the GRI-Commodity Surcharge and the ACA Commodity Surcharge, as well as the applicable PEPL Fuel Reimbursement Charges.

6. Existing GDS Contract 12625 will be amended to reflect the new EFT and FS service:

a. The existing termination date would be eliminated and replaced with a new termination date of September 30, 2005.
b. The existing winter period (November through March) maximum daily transportation contract quantity of 26,868 Dth would be deleted and replaced with a maximum daily transportation contract quantity of 46,867 Dth consistent with the EFT agreements reflected herein.
c. The existing summer period (April through October) maximum daily transportation contract quantity of 17,881 Dth would be deleted and replaced with a maximum daily transportation contract quantity of 27,880 Dth consistent with the EFT agreements reflected herein.
d. The Maximum Stored Quantity (MSQ) reflected in the GDS agreement shall be modified to a volume of 1,471,800 Dth consistent with the new FS agreement reflected herein.
e. MGEMO would be designated as primary delivery point.
f. Warrensburg, the new delivery point to be constructed, will be a part of the MGEMO primary delivery point.
g. FLD FS Storage would be designated as secondary delivery point.
h. PNYEX would be designated as secondary delivery point.
i. A portion of the FS capacity equal to 7,576 Dth/day under the new FS Storage Agreement would be designated as GDS balancing consistent with PEPL's FERC Gas Tariff, Rate Schedule GDS, under "Applicability and Character of Service".
j. An additional portion of the FS capacity equal to12,424 Dth/day would be available to MGE as no-notice storage service.
k. MGE will have the rights to inject up to a maximum of 15,000 Dth/day, 365 days a year and rights to withdraw up to a maximum of 20,000 Dth/day, 365 days a year under its new FS service. Such injection and withdrawal rights will be used for GDS balancing.

7. Existing WS Contract 12626 (Winter Storage)

a. Would be terminated effective September 30, 2000, subject to the execution of a new FS Contract outlined in Part 8 below.
b. Any Storage Balance at the termination of this contract on September 30, 2000, will be transferred to the new FS Contract outlined in Part 8 below.

8. A new FS Contract would be originated #017073

a. The term will be October 1, 2000 through September 30, 2005.
b. The new FS Contract will have an MSQ of 1,471,800 Dth.
c. The primary receipt point will be designated as FLD FS.
d. The primary delivery point will be designated as FLD FS.
e. The service basis will be annual, 365 days per year.
f. The injection rights will be 15,000 Dth/day, 365 days per year, subject to MGE's available FS stored volume.
g. The withdrawal rights will be 20,000 Dth /day, 365 days per year, subject to MGE's available FS stored volume.
h. The injection and withdrawal rights are annual, 365 days per year, regardless of MGE's FS storage balance as long as the injection or withdrawal does not cause MGE to go over its MSQ and is subject to available storage volume. There will be no storage injection or withdrawal ratchets.
i. The annual ARCA will be $1,092,269 inclusive of the Field Area Deliverability Charge and Field Area Capacity Charge and any new reservation charges and/or surcharges that PEPL may have approved during the term of this agreement. It is exclusive of the Field Area Injection Charge and the Field Area Withdrawal Charge, as well as the applicable PEPL Fuel Reimbursement Charges.

9. Existing IOS Contract 15097

a. Would be terminated effective September 30, 2000, subject to the execution of a new FS Contract outlined in Part 8 above.
b. Any Storage Balance at the termination of this contract on September 30, 2000, will be transferred to the new FS Contract outlined in Part 8 above.

10. Equal Monthly Payments

a. Beginning October 1, 2000, MGE will pay PEPL an ARCA of $3,777,087 for the aforementioned services. Such payment will be made in equal monthly installments of $314,757.25.
b. PEPL will be entitled to allocated the ARCA among the four new and/or amended MGE transportation and storage contracts in any manner consistent with their tariff to achieve equal monthly payments of the reservation charge amounts set forth above.

11. Aid in Construction - Warrensburg

a. PEPL will provide $1.4 million Aid in Construction as consideration for MGE entering into the above services within sixty days of full execution of this letter agreement.
b. These funds will be used to install:
   i) 24,500 feet of eight- inch main,
   ii) three district regulator stations,
   iii) an odorizer
   iv) SCADA equipment
c. All of the above will be owned and operated by MGE.

d. PEPL will construct, own and operate the pipeline interconnect, including all taps, metering and electronic gas measurement facilities.
e. PEPL will grant MGE ingress and egress rights to such metering and measurement facilities for purposes of installing, inspecting and maintaining its equipment; an odorizer, regulators and electronic equipment and construction of an additional twenty-five to thirty feet of pipe to MGE's distribution system.
f. The routing of the new pipeline, and the location of the pipeline interconnect, and the location of MGE's facilities on PEPL's measurement site will be as agreed upon by both parties, but shall not deviate substantially from the plans previously submitted by MGE.
g. PEPL will exchange real time measurement data with MGE, subject to the Licensing Agreement.

12. Regulatory Out

a. This letter agreement is subject to all present and future valid laws and lawful orders of regulatory bodies now or hereafter having jurisdiction over the parties, or either of them; and should either of the parties, by force of any such law or regulation imposed at any time during the term of this letter agreement, be ordered or required to do any act inconsistent with the provisions of this letter agreement, then the other party shall have the option to terminate any or all of the contracts.
b. Should MGE exercise its right to terminate its contracts under this regulatory out provision prior to September 30, 2003, MGE shall refund one-half of the funds advanced pursuant to Part 11 above.

If the above accurately reflects terms and conditions for an agreed upon Discounted Transportation and Storage Service Proposal, please signify your agreement by signing as indicated below. MGE will remain open to further discussion regarding discounted transportation and storage services from PEPL if the above does not correctly reflect our previous discussions. MGE will leave the proposal open for acceptance through March 30, 2000.

Sincerely,

Michael T. Langston
Vice President

AGREED TO AND ACCEPTED
This 22nd day of March, 2000

CMS PANHANDLE EASTERN PIPE LINE COMPANY

By: ______________________