BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

Case No. GO-96-243

MISSOURI GAS ENERGY
RELIABILITY REPORT
JULY 1, 1997 THROUGH JUNE 30, 1998

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May 1, 1997

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RELIABILITY REPORT
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SYSTEM DEMAND PROJECTIONS

Introduction

A traditional forecast projects monthly requirements by customer class (e.g., residential, commercial and industrial). The residential and commercial class forecasts are broken down to show space heating (heat sensitive load) separately.

Forecasts of heat sensitive loads are made on a use per customer basis, recognizing the effect of temperature (or weather conditions) on consumption. The customer forecast can be made on a simple trend projection. This will suffice unless a significant growth pattern is anticipated.

The use per customer element of the forecast is a critical one. It is difficult to estimate, however, because the heat load is greatly influenced by temperature. Forecasting these independent variables with accuracy is not possible. Therefore, forecasts of natural gas loads (except where space heating is inconsequential) are made on the assumption that "average" or "normal" temperature conditions will prevail. Missouri Gas Energy (MGE) has reviewed available heating degree days on the basis of both 30-year and 10-year periods. When compared to actual weather experienced over the last seven to ten years, the 30-year data has tended to overstate consumption. For this reason the Company has updated its models to consider 10-year weather for projecting future demand.

Past use per customer is adjusted to what it would have been had normal temperature conditions been experienced. Historical sales and daily temperatures are used to determine the statistical relationship between these two time series. This relationship is used to adjust actual temperature sensitive loads to what they would have been under "normal" conditions.

In the natural gas industry, the term "degree day" or "heating degree day" is used to describe the temperature conditions that affect heating loads. The assumption is that above some temperature level, usually 65 degrees Fahrenheit, there is no significant heating load. Heating degree days (HDD) are the number of degrees on any one day that the average temperature is less than 65 degrees Fahrenheit. For example, if the average of the high and low temperatures over a twenty-four hour period is 40 degrees Fahrenheit there would be 25 "heating degree days" (65 - 40 = 25). Adding up the heating degree days in a year or winter season measures the severity of the weather.

Space heating loads are separated from total loads and a forecast is made using two parts: a base load and a heating load. The base load is the average use per customer during the summer months when there are no heating degree days. The heating load is the difference between the base load and the total load. The Company refines this Y-intercept technique by using linear regression analysis whereby the statistical correlation can be measured. The base and heat loads are then added together to arrive at the monthly and annual load forecasts.

The Company's load forecasts are 10 year projections of anticipated requirements on both an annual and peak day basis. Because the Company continually strives to improve forecasting accuracy, the methods described herein are subject to, and will change over time. The data used in developing these forecasts is that which is made available to the Company by its pipeline suppliers through the course of regular business. If this data changes due to prior period adjustments or other similar circumstances, the Company will update its forecasts accordingly.

PEAK DAY PROJECTIONS

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 to meet all of its firm sales obligations under such conditions.

Because they account for a small portion of total sales, peak day loads have a modest revenue impact. Nevertheless, they are important because of the operating and fixed costs that are incurred in providing a system to meet peak loads. Such costs include activating peaking supply contracts and purchasing additional volumes on the open market, as well as those associated with providing adequate transmission and distribution capacity to meet peak demand.

As in the annual load forecast, the peak day load is calculated based on an analysis of the relationship between daily weather and daily sales requirements. The data are developed from firm sales and historic weather information. The design peak day forecast is calculated by averaging the heating degree days of the four most recent coldest winter days and applied to usage per heating degree day. The historic peak day forecast is based on the single, coldest 24-hour period for which there are verifiable records. A series of regression analyses are performed on the historic data described above to determine the base (constant) and weather sensitive or heat load (variable) factors. These factors can then be applied to degree day figures and projected customer growth patterns to approximate load requirements for a peak day.

Historic Peak Day

The historic peak day is based on the lowest temperatures that might be expected in a service area. Missouri Gas Energy's predecessor for its Missouri operations advised MGE that this peak occurred on December 23, 1989 at a level of 89 HDD. Through independent research the Company verified that the actual peak was 85 HDD and that it occurred in the Kansas City market area on December 21, 1989. This represents an average daily temperature of -20 degrees Fahrenheit. Because it is weather that was actually experienced, the Company believes that 85 HDD is the extreme that should be used for planning purposes. The Company does not believe this weather is likely to occur regularly. Conversely, it may not be the coldest weather the region will ever experience. The Company believes that failure to plan for actually experienced extreme cold weather would leave it vulnerable to meeting its firm service obligations.

Design Peak Day

The four most recent peak days experienced in the Missouri service area occurred on January 10, 1982 with 76 HDD, December 24, 1983 with 77 HDD, December 21, 1989 with 85 HDD, and February 2, 1996 with 73 HDD. The average of these winter peak days is 77 HDD. The Company uses 77 HDD for its design peak day and has determined that at this point 99 percent of Missouri's peak demand will be met. This is one of the Company's key points for supply and capacity planning purposes.

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Peak Day/Heating Degree Day Analysis

1997

The peak day for the 1996-1997 heating season occurred on January 10, 1997. The market area experienced 67 HDD with an average wind speed of 15 mph for the 24 hour period. After adjusting for the effects of wind speed, a value of 70 HDD was arrived at for purposes of forecasting peak system loads. The following table illustrates how the current projections for the historic and design peak day demands were extrapolated.

January 10, 1997

MCI - Kansas City International Airport
WNG - Williams Natural Gas Company
PEPL - Panhandle Eastern Pipe Line Company
KPOC - Kansas Pipeline Operating Company
T-P-T - Third Party Transportation

The slight difference of [redacted] in historic peak day projections between the 1996 and 1997 forecasts provides added confidence in MGE's forecasting methodologies. Likewise, this comparison indicated that MGE's average annual escalator of [redacted] continues to be substantially correct. The results of the revised peak day projections are shown in Figure I-1, "Transportation Capacity Compared To Historic Peak Day" and Figure I-2, "Transportation Capacity Compared To Design Peak Day." This newest study covers a time horizon of 1998 through 2008, and indicates a need for incremental capacity to cover the historic peak day prior to the 2003-2004 winter season.

The "Peak Day Chronology," which outlines the history of the Company's peak day analyses and the results, is found in Appendix A. Also included in the study is the above updated peak day forecast covering the time horizon beginning in 1998 and ending in 2008.

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Figure I-2

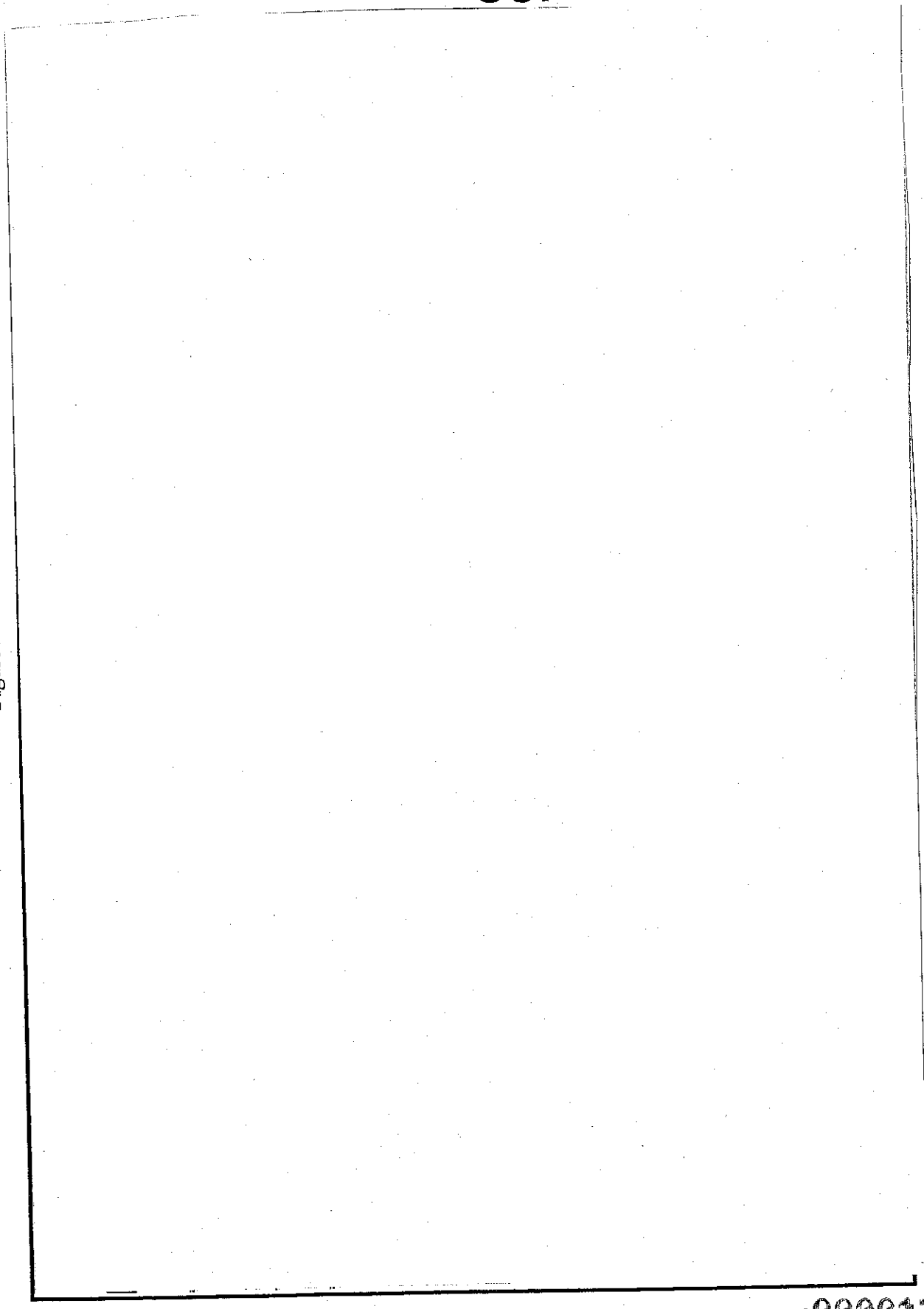

Figure I-1

ANNUAL LOAD PROJECTIONS

Annual load forecasts are maintained on a twelve month rolling basis (short term). Long term (ten year) forecasts are developed by calculating and applying an average annual escalation factor to the short term totals. The Company develops three separate forecasts for planning purposes; a base case, high case, and low case forecast. A description of each follows:

Base Case

The base case forecast is a "most likely" scenario. The "base load" component of this forecast is arrived at by calculating an average daily volume for the summer months of July and August and applying it to each month of the forecast period. Notwithstanding the addition of incremental load that would necessitate an immediate adjustment, this component remains constant and is updated once each year for the prior 12 month period. The "heat load" component of this forecast is developed by "weather normalizing" delivery volumes from the most recent 12 months ended. Once weather and delivery volumes are known for a month, a "normalization" factor is calculated by dividing the actual heating degree days by the normal heating degree days. The monthly heat load is arrived at by subtracting the base load (see above) from the total delivered volume. The normalized heat load is calculated by dividing this remainder by the "normalization" factor. The base case totals are the sum of the normalized heat load and the base load for each month, multiplied by an average annual escalation factor.

High Case

The high case scenario is developed using the coldest weather that has occurred, on a month-by-month basis, during the preceding 15 year period. A "high case factor" is calculated by dividing actual heating degree days (for the coldest month) by the normal heating degree days for the same month. The weather normalized volumes calculated in the base case are divided by the high case factor to establish the adjusted heat load. The high case totals are the sum of the adjusted heat load and the base load for each month, multiplied by an average annual escalation factor.

Low Case

The low case scenario is developed using a similar methodology, but uses the warmest weather that has occurred on a month-by-month basis during the preceding 15 year period. A "low case factor" is calculated by dividing actual heating degree days (for the warmest month) by the normal heating degree days for the same month. The weather normalized volumes calculated in the base case are divided by the low case factor to establish the adjusted heat load. The low case totals are the sum of the adjusted heat load and the base load for each month multiplied by an average annual escalation factor.

Monthly Peak/Heating Degree Day Analysis

When all months are combined, the high and low cases represent unlikely annual periods. The purpose of these scenarios is to identify a range of demand that could occur during any given month included in the study horizon. The "most likely" high and low annual forecasts

are arrived at by adjusting the base case scenario by a percent of normal weather (e.g., 105 percent for high and 95 percent for low).

Attached are two annual load forecasts for fiscal year 1998. The first study shown in Table I-1 utilizes 30-year weather data and is the basis for the Company's current projections. The second study shown in Table I-2 utilizes 10-year weather data. Since projections based on 30 years result in a more conservative forecast, for reliability purposes, the Company will use it for fiscal 1998 planning. During this time, MGE will monitor the actual results and may base future plans wholly on 10-year weather data. In any event, the differences appear slight. Monthly weather-induced variations in demand can be viewed as the difference between the "low," "base," and "high" case scenarios.

Table I-1

Table I-2

PROJECTED SUPPLY/TRANSPORTATION REQUIREMENTS

Introduction

Accurate forecasting of demand over short (one year) and long (ten year) time horizons provides the Company with the planning tool it needs to contract for additional gas supplies and transportation capacity in a timely and cost effective manner. Attached are the Company's projections of supply and transportation requirements for the forecast period.

Supply Requirements

The system requirements include the forecasted customer demand, including fuel, plus the storage injection. The available supply consist of the monthly contract quantity plus the storage withdrawal. The difference between these two totals is the additional supply needed. Table I-1, and Figure I-1, "Projected Monthly Supply Requirements," show the system demand requirements as compared to the available supply on a monthly basis for the forecast period. Table I-2, "Projected Supply Requirements, Design Day By Month," shows the system demand requirements as compared to the available supply on a daily basis for the forecast period.

The Company's supply needs are also discussed in Section II, "Additional Supplies To Be Contracted For" and Section III, "Additional Actions Taken to Ensure Reliability."

Table I-3

Figure I-3

Table I-4

Transportation Requirements

As previously described, forecasts are developed for both annual and peak day requirements. However, it is the peak day forecast that drives what level of firm transportation service will be necessary in a given year. The planning process must result in a transportation portfolio that meets firm customers' peak day requirements during the period of the study.

The planning cycle of a pipeline company is substantially longer than for a local distribution company (LDC). This is due to the longer lead times and economics associated with pipeline construction and capacity expansion projects. For this reason, the LDC must contract capacity in longer blocks of time, usually five to ten years. The timing of pipeline expansion projects do not necessarily match the needs of the LDC and may result in a temporary surplus of firm capacity. Because MGE's capacity is contracted for in longer blocks and added periodically over a five to ten year time horizon, capacity may be lower or higher than the historic peak day at any given point in time. There is, however, sufficient capacity to meet the design peak day, which ensures 99 percent of Missouri's peak demand will be met. The Company endeavors to maintain a reasonable reserve margin above the design day minimum to meet the historic peak.

A comparison of projected peak day demands to transportation capacity is shown in Figure I-1 on page 8. Transportation capacity compared to projected design day demands is shown in Figure I-2 on page 9. Tables I-1 and I-2 on pages 13 and 14 show the annual demand for the forecast period. A detailed discussion of transportation requirements can be found in Section III., "Additional Actions Taken To Ensure Reliability."

SUPPLY/DELIVERY RESOURCES

Introduction

An increased number of gas supply and capacity resource options are emerging as a result of a general move toward competition brought about by the unbundling of gas services. The best options may be the ones that perform best in terms of satisfying multiple objectives, including reliability, under realistic alternative forecast scenarios. A gas procurement plan defines a course of action for the near-term that is consistent with the Company's long-term goals. Continuous monitoring will ensure that it is still the appropriate plan as conditions change over time.

Pipeline transportation facilities are designed, installed, and dedicated to a certified capacity. Firm transportation resources may be acquired by way of contracting for available capacity, relinquishment of existing capacity from a pre-existing holder, or through short- or long-term release programs. Interruptible transportation is inexpensive compared to firm transportation. It does not provide firm capacity on a contractual basis and therefore lacks the reliability of firm transportation.

Storage provides additional deliverability during the heating season. Because of filling constraints and limited availability, underground storage is suitable for heating season loads, peak day, or daily balancing.

Demand growth or the expiration of supply resources will necessitate the need for new resources. Resources can be screened according to their ability to best meet the needs of the area(s) to be filled, e.g., daily, monthly, or peaking supply. A sound gas supply portfolio satisfies diverse evaluation criteria (e.g., cost, reliability, risk, efficiency, and competitiveness) by performing well across all these criteria and for a range of alternative futures. The Company's goal is to provide a commodity that is reliable over a broad range of possible outcomes while maintaining service at a price that provides value to the customer.

The following information relating to pipeline and storage capacity reviews existing transportation capacity and storage deliverability and any areas where additional capacity needs have been identified for the reporting period. Regarding supply resources, the following information reviews existing gas supply contract information as to the various terms affecting the reliability of supply. Additionally, it covers the diversity of supplies, supplier performance data, and identifies additional supply requirements needed to meet forecasted demand during the reporting period.

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PIPELINE TRANSPORTATION/STORAGE CAPACITY

Pipeline Capacity

The Company currently holds firm transportation contracts on four interstate pipelines; Williams Natural Gas Company (WNG), Panhandle Eastern Pipe Line (PEPL), Kansas Pipeline Operating Company (KPOC), and KN Interstate Gas Transmission Company (Pony Express Pipeline). The combined deliverability of the four contracts is [redacted] Dekatherms per day (Dth/day). This level of service is adequate to cover the design peak day of [redacted] and is [redacted] Dth above the historical peak day of [redacted] Dth projected for the 1997-1998 heating season. As discussed previously in Section I, "Transportation Requirements" on page 19 of this report, capacity is typically contracted for in five to ten year blocks and added periodically over a five to ten year time horizon. Because of this phenomenon, the contracted capacity in any given year may be lower or higher than the projected historical peak day demand. The Company does assure that it has adequate firm capacity under contract to meet its design peak day.

In addition to the firm capacity described above, the Company holds interruptible contracts on two of the four pipelines with a total deliverability of [redacted] Dth/day. Based on experience, the Company believes that some level of interruptible transportation will be available on a peak day and this service can be utilized to help meet peak demand.

Storage Deliverability

The Company currently owns storage rights totaling [redacted] Dth on two interstate pipelines, Williams Natural Gas (WNG) and Panhandle Eastern Pipe Line (PEPL).

The combined deliverability of [redacted] Dth/day is utilized to augment flowing gas during the withdrawal months of November through March and represents approximately two-thirds of the total supply used to meet the peak day demand.

Identified Needs for Transportation or Storage Capacity

As described above, peak day projections drive the need to add firm pipeline transportation capacity. As a result of the peak day forecasts and the need to alleviate constraints on certain Williams Natural Gas line segments, the Company has contracted to add [redacted] Dth/day of deliverability on KN Interstate Pipeline's Pony Express Pipeline into the Kansas City market area, and an incremental [redacted] Dth/day of deliverability on the WNG system in southwest Missouri for the 1997-1998 heating season. This additional capacity will cover the Company's projected design day through the 10-year planning horizon (1998-2008). There is an identified need to add capacity prior to the 2003-2004 heating season to cover the projected historic peak day. The peak day forecasts and transportation capacity are shown in Figures I-1 and I-2 on pages 8 and 9. A detailed discussion of transportation capacity is in Section III, "Additional Actions Taken To Ensure Reliability." There is no identified need to add storage deliverability at this time.

GAS SUPPLY RESOURCES

Supplies Under Contract

Contract briefs that identify all firm supplies currently under contract can be found in Appendix B. They are in numerical order by MGE's contract number and are considered highly confidential by the Company.

The briefs summarize the various provisions of the contract including the contract date; contract quantity; length of the term; and terms that affect reliability, which include receipt point data, warranties regarding performance, and force majeure provisions.

Receipt point information can also be found on Table II-3, "Supplier Delivery Points," on page 30 of this report. The table groups these contracts into geographical areas.

Additional Supplies To Be Contracted For

Demand

To determine new supply requirements, the Company reviewed demand and developed a Base Case, High Case, and Low Case scenario as described in Section I, "Annual Load Projections," on page 10. Projected monthly demand was calculated as the "Base Case" scenario because it is the "most likely" to occur. Daily demand was calculated by profiling the design day requirements across the annual period. Supply contracts were reviewed to determine the Company's present level of commitment. Supply and demand were then compared to identify monthly and daily supply needs. The difference between the current level

of supply and projected demand, on a monthly and daily basis, became the additional supplies needed.

Supply

After reviewing the difference between current supply commitments and projected demand, a range was identified between the low and high case demand scenarios that established levels of commitment that could be used for supply planning. Monthly weather patterns were evaluated to further define commitment levels for purposes of prudence and reliability. Table II-1, "Additional Supplies To Be Contracted For, Average Monthly Demand" and Table II-2, "Additional Supplies To Be Contracted For, Design Day By Month" show the results.

Table II-1

Table II-2

Request For Proposal

Based on the foregoing review of demand and supply, a Request For Proposal (RFP) is currently being developed for the forecast period. The supply requirements to be identified in the RFP will be categorized into four levels of commitment; baseload, variable, swing, and peaking.

A portion of the supply requirements, which will not be addressed in the RFP, will be purchased on a firm, monthly basis. Also, the portion of supply for the period April 1997 through October 1997 will not be included in the RFP. Storage levels were reviewed at the end of March and the balance was found to be above the planned level due to warmer than normal weather during the month of March. In addition, a favorable and flexible supply arrangement was negotiated to cover a large portion of storage fill requirements. Therefore, additional storage fill needs will be purchased on a monthly basis during the April through October time period. Review of the storage level at the end of the withdrawal season allows the Company to make prudent decisions as to the proper level of supply requirements needed during the fill cycle and to capitalize on market pricing. The winter supply needs will be bid.

GEOGRAPHICAL DIVERSITY OF SUPPLIES

The following Table II-3 shows the supplier delivery points grouped together by geographical area. Each geographical area is represented by a letter. The maximum daily contract volumes, "MDQ, MMBtu/day," are summed by area. Each area group total represents the maximum contract volume available for that particular area. Due to multiple access rights, the numbers will not necessarily add up. For example, one contract may have a maximum daily quantity of 15,000 MMBtu/day and all or a portion of it may be taken at one or several receipt points. Figure II-1 on page 31 illustrates the diversity of the Company's supplies. The groups listed on Table II-3 correspond with the letters on the map.

Table II-3

Figure II-1

SUPPLIER PERFORMANCE

Introduction

Since acquisition, the only severe weather that Missouri Gas Energy has been experienced occurred during the January 31 through February 6, 1996 time period. On February 2, 1996, MGE experienced a peak day of 73 HDD as recorded at MCI, with no required adjustment for wind speed. The Company assessed the performance of its suppliers during this arctic front in the July 1, 1996 through June 30, 1997 Reliability Report.

On January 10, 1997, MGE experience a peak day for the 96-97 heating season of 67 HDD, which was adjusted for wind speed to 70 HDD. The following Table II-4 illustrates the suppliers' level of performance on the January 10 peak day.

Table II-4

SUPPLY FREEZE-OFF CONSIDERATIONS

MGE purposely contracts for its supplies to diversify away from dependence on a single production area as illustrated on page 31, Figure II-1, "Geographical Diversity of Supplies." The Company's portfolio has supplies under contract that have been sourced from the following major basins: the Kansas Hugoton, the Oklahoma Hugoton, and the Wamsutter field in Wyoming. The Company also contracts for supplies from basins in the Texas Panhandle and in Kansas and Oklahoma outside the major areas.

The success of the Company's diversity is substantiated by a survey of supplier performance, which is shown on Table II-4. The Company's plan continues to prove to be effective in securing adequate gas supplies from reliable sources. Nevertheless, MGE continues to explore opportunities to expand its supply options to other geographic regions.

The Mid-Continent/Rocky Mountain regions of the United States are seeing many new pipeline projects get under way to meet new requirements of transporting gas to more lucrative northern and eastern markets. These projects could ultimately result in a larger diversity of supply options available from various geographic regions. Because the majority of these regions have colder climates, the engineering and wellhead equipment are designed to prevent freeze-offs. MGE has positioned itself to take advantage of new opportunities as they become available.

SUMMARY AND CONCLUSIONS

Introduction

This section summarizes projected system demand and supplies. It also discusses additional actions the Company has taken or will take to ensure reliability of supply, including the administration of the emergency curtailment tariff provisions if needed.

DISCUSSION OF PROJECTED DEMAND AND SUPPLY NEEDS

Projected Demand

Accurate projections of system demand are vital to ensuring that MGE can meet its sales obligations in a cost efficient and reliable manner. The Company's short- and long-term forecasts are the product of continuously collecting, analyzing, and modeling the best available weather, volume, and customer data. As a result of these efforts, Missouri Gas Energy has been identified by its largest pipeline supplier as the benchmark by which other customers should set their forecasting standards.

Historically, MGE's operational forecasts of daily and monthly demand have consistently been within two to five percent of actual usage. Given this track record, the Company places a great deal of confidence in its forecasting ability and believes it has developed the proper foundation on which to base transportation capacity and supply planning. The Company constantly endeavors to improve its forecasting techniques and stays abreast of new and improved technologies to aid in this effort.

Projected Supply

The basic approach MGE follows in developing supply to meet anticipated requirements begins with an examination of the various sources of supply that are available on a daily, monthly, seasonal, and annual basis, recognizing the contractual obligations for delivery, while simultaneously attempting to meet projected demand for every day throughout the forecast period at the best possible cost. Once these calculations are made and requirements are stated on a calendar year basis, it is possible to begin to match the supply to the projected

requirements. The result of this process is to develop a Request For Proposal that is then sent to all potential suppliers.

Further discussion of the Company's supply needs is included in the following Section, "Additional Actions Taken to Ensure Reliability."

ADDITIONAL ACTIONS TAKEN TO ENSURE RELIABILITY

Supply

The supply options of MGE's portfolio consist of various components. These include firm and non-firm supplies contracted for on either a long- or short-term basis, firm or interruptible transportation on four interstate pipelines, and two storage services. The utilization of these components varies depending on demand and operating conditions, but the following descriptions provide a basic understanding of the current and potential future elements of the Company's supply options.

Firm supplies are contractually guaranteed to be available when called upon by the Company, absent force majeure occurrences, which means beyond the control of the supplier or pipeline. This reliability of service is a component of the cost and, therefore, commensurately higher priced than similar non-firm spot supplies. The reliability of service factor is frequently reflected in a demand charge or minimum payment that is not dependent upon the supply being used. Firm supply contracts may also have a minimum take requirement with associated economic penalties for not taking what the Company is obligated to purchase. This provides the supplier with a guaranteed market for the gas, making production more cost effective.

MGE has contracted for several types of firm resources. These include both firm transportation service and firm gas supplies. Contract specifics vary by contract with the common denominator being firm supplies, except for force majeure. Some supplies may be for fixed prices and some may be indexed to spot prices. Some contracts may be assessed fixed

reservation charges while others may have minimum daily or monthly take requirements. Most contracts contain provisions for symmetrical penalties for failure to use or supply the gas according to contract terms. Contract terms governing reliability and covering damages on baseload 30-day spot transactions will be renegotiated, where possible, to enhance the supplier's performance under such contracts. Contract details will vary from year to year, depending on the Company's and supplier's needs and the general trends in the market.

A portion of the Company's supply portfolio is contracted for on a firm, year-round basis. The Company's ability to contract for these cost effective supplies is increased due to the relatively low summer demand on the system and its ability to inject gas into storage during the summer. Storage gas is assumed to be cycled to its capacity level each year. This means that the Company will inject close to 100 percent of its storage volume during the year and then withdraw it later that same year. Storage services, thereby, become an avenue in providing firm gas supplies. The Company currently has access to two storage services.

The Company's firm gas requirements are weather sensitive. That is, loads are high during the winter heating months and low during the warmer spring, summer, and fall months. Contracting for supplies year-round when they are needed for only a few months results in a surplus during periods of low demand. This surplus is affected by the amount of storage fill gas that is needed in each region. At the same time, natural gas production is a year-round operation and producers could be affected negatively if they sell gas only during times of high demand.

In response to this dilemma, the natural gas industry has developed what is known as the spot market. This allows producers to sell on a short-term basis (30 days or less), those supplies that are not committed to a firm contract or for which no demand is currently being made under firm contracts to which the producers are committed. The spot market allows producers to sell their gas at market sensitive prices year-round. It also allows marketers and consumers, both large end use customers and local distribution companies, to purchase supplies at competitive prices.

Spot market supplies are short-term agreements that are usually interruptible. These agreements are balanced by reduced performance obligations on both sides of the transaction. Prices are market driven, which means that at any given time they may be either lower or higher than longer term contract prices. Spot supplies may be used to supplement firm contracts during times of peak demand or to displace contracted volumes when it is cost effective. These spot supplies may be transported under firm or interruptible transportation agreements, depending on availability.

MGE will purchase spot gas to displace and/or supplement other supplies and will continue to be active in the spot market. MGE plans to minimize its cost of gas by injecting spot gas into storage at the maximum levels allowed. The risk is that gas supplies purchased on the spot market may not be available in large quantities during periods of high demand because they are subject to being called on under firm contracts.

For MGE, a balanced supply portfolio maximizes the benefits and minimizes the risks associated with purchasing spot market gas. At the same time, it is important to minimize the cost of firm supply contracts, while ensuring a sufficient gas supply to meet peak day requirements. The Company is committed to providing reliable, reasonably priced natural gas service to its customers today and in the future. Judicious negotiation of various supply and transportation contracts is the method by which this commitment will be achieved.

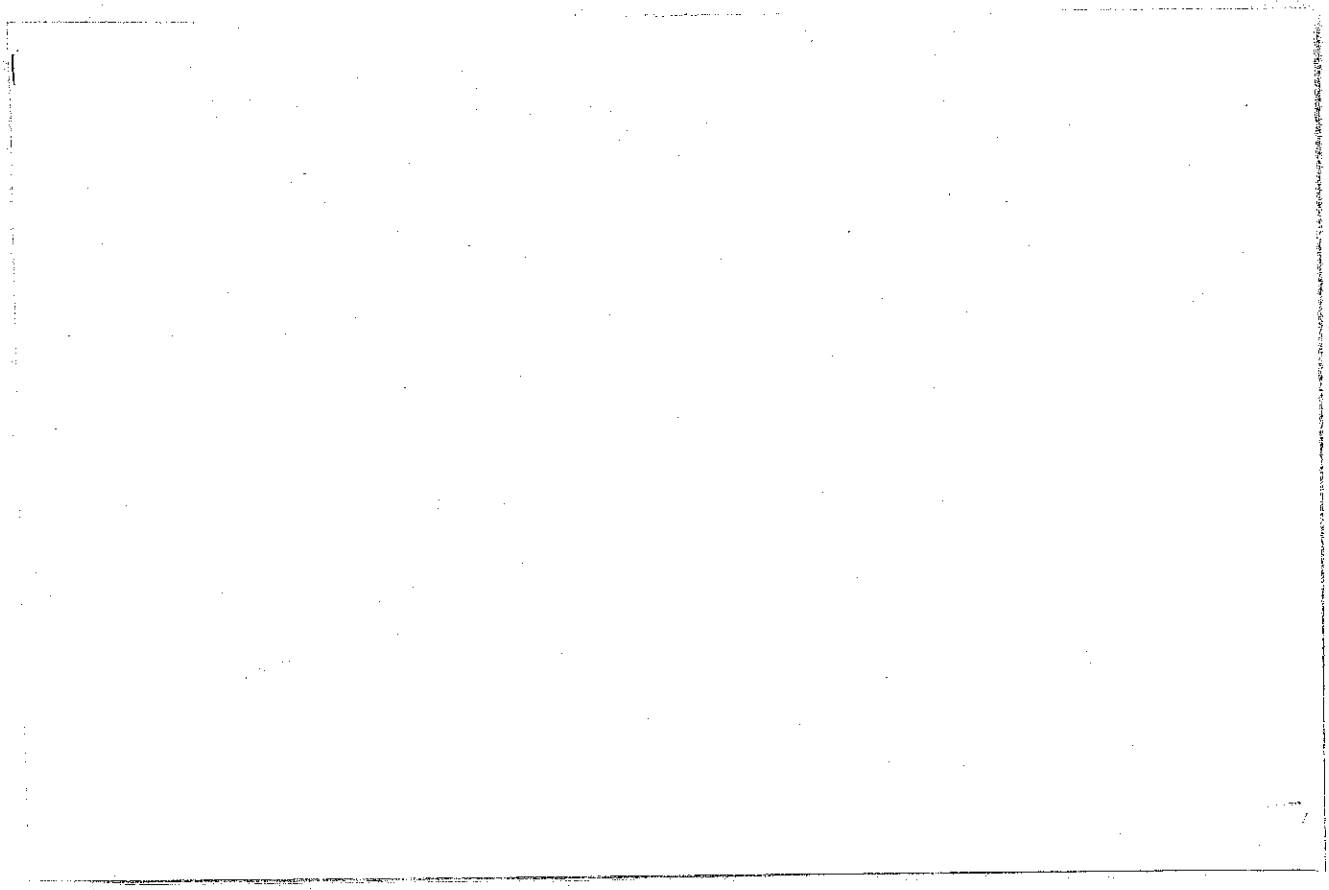
MGE will continue to contract for supplies from a variety of geographic regions. The diversity of supply basins was discussed in Section II., "Geographical Diversity of Supplies." The Company will also continue to keep a mix of suppliers in its portfolio to prevent a heavy reliance on any one supplier.

Transportation

MGE's service territory is located in western Missouri, with service primarily in the St. Joseph, Joplin, and Kansas City, Missouri areas. The St. Joseph and Joplin areas are served exclusively by Williams Natural Gas Company. The Kansas City area is currently served by three interstate pipeline systems: 1.) the WNG interstate system, 2.) KPOC's Riverside interstate pipeline system affiliated with the Bishop Group, and 3.) the Panhandle Eastern Pipe Line system. The Company has also contracted for additional service into the Kansas City area from KN Interstate's Pony Express Pipeline, which is expected to begin service on October 1, 1997.

Focusing on the Kansas City area, which consumes the majority of the gas supplies, MGE has primary interconnects with WNG's system in three locations: 1.) the Riverside Station located in Riverside, Missouri, 2.) the Glavin State Line Station located in southwest Kansas City, Missouri on the Missouri and Kansas state line, and 3.) the Grain Valley Station located on the eastern edge of the city. These three stations feed into a high pressure loop system that provides essential feeds into the downtown area and the surrounding suburban communities. They also provide primary deliveries into the Kansas City metropolitan area.

The Riverside pipeline system currently delivers at a single point, the Riverside Station, with such deliveries paralleling those made by WNG in the same area. The Panhandle Eastern system provides exclusive service to small farming communities located east of Kansas City, Missouri. Panhandle Eastern also provides limited service to the Kansas City metropolitan area through two interconnects located on the southwest side of the city.



The following tables further illustrate MGE's pipeline capacity and storage deliverability. Table III-1 shows pipeline capacity and storage deliverability effective June 1, 1997 and Table III-2 shows capacity and deliverability effective October 1, 1997, except as noted.

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Table III-1

Table III-2

EMERGENCY CURTAILMENT PLAN

Attached is the revised Section 13 of the Company's General Terms and Conditions as approved in Case No. GR-96-285. This section addresses the Priorities of Service under which the Company will curtail service during periods of supply deficiencies or limitation of pipeline capacity. The Company stands ready to execute this plan as conditions warrant.

MGE believes this report verifies that adequate steps have been taken to ensure the reliability of supply for its resale customers. The inability to control volumes delivered for end use by MGE's transport customers may lead to the implementation of this plan in the event there are major failures in third party supplies.

Missouri Gas Energy,
a Division of Southern Union Company
Name of Issuing Corporation

For: All Missouri Service Areas
Community, Town or City

GENERAL TERMS AND CONDITIONS FOR GAS SERVICE

13. PRIORITY OF SERVICE

13.01 PURPOSE: The purpose of this rule is to establish the priority of service required to be provided by Company during periods of natural gas supply deficiencies and/or capacity constraints on the Company's distribution system.

13.02 CURTAILMENT: During periods of natural gas supply deficiencies and/or capacity constraints on the Company's distribution system, the Company will curtail or limit gas service to its customers (or conversely, allocate its available supply of gas) as provided in this Rule 13. Curtailment may be initiated due to a supply deficiency or limitation of pipeline capacity or a combination of both. For purposes of this Rule, interruption of service to a particular customer due to the failure of the customer's transportation volumes to be delivered to Company does not constitute curtailment under this rule.

13.03 PRIORITY CATEGORIES: Each customer's requirements shall be classified into priority categories. The priority categories to be utilized by the Company for allocating available gas service, listed in their order of priority, with Category 3 being of the lowest priority and Category 1 being the highest priority of service to be retained, are listed below:

For an MGE Sales Service Supply Deficiency

Category 1.

Sales service to residential customers, public housing authorities, public schools, hospitals, and other human needs customers receiving firm sales service from the Company

Category 2.

Commercial sales service

Category 3.

Industrial sales service

DATE OF ISSUE Jan. 30, 1997
month day year

DATE EFFECTIVE February 1 1997
month day

ISSUED BY: Charles B. Hernandez Director, Pricing and Regulatory Affairs
Missouri Gas Energy, Kansas City, MO. 64111

FORM NO. 13

P.S.C. MO. No.1 First Revised SHEET No.R-82
Cancelling P.S.C. MO. No.1 Original SHEET No.R-82

Missouri Gas Energy,
a Division of Southern Union Company
Name of Issuing Corporation

For: All Missouri Service Areas
Community, Town or City

GENERAL TERMS AND CONDITIONS FOR GAS SERVICE

For an MGE Distribution System Capacity Deficiency

Category 1.

Sales or transportation service to residential customers, public housing authorities, public schools, hospitals, and other human needs customers receiving firm sales service from the Company

Category 2.

Commercial sales service and commercial transportation service

Category 3.

Industrial sales service and industrial transportation service

13.04 CURTAILMENT PROCEDURES: Notice shall be given to all affected LVS customers by telephone or in writing. Notice shall be given to all other affected customers via mass media (radio and television). Notice shall be given as far in advance as possible and may be changed by the company as conditions warrant.

Curtailment shall be assigned initially to the lowest priority category (Category 3) and successively to each higher priority category as required. Should partial service only be available to an affected category, deliveries to individual customers shall be limited to the customer's pro rata share of available supply, such allocation to be based on the ratio of the customer's requirements in the category for which partial service is available to the aggregate requirements of all the Company's customers in the same category.

13.05 UNAUTHORIZED USE CHARGE: If during any period of curtailment, any customer takes, without the Company's advance approval, a volume of gas in excess of the volumes authorized to be used by such customer, said excess volumes shall be considered "unauthorized use" and will be billed pursuant to the Unauthorized Use Charges as set forth in the Company's approved tariff.

DATE OF ISSUE Jan. 30, 1997
month day year

DATE EFFECTIVE February 1 1997
month day year

ISSUED BY: Charles B. Hernandez Director, Pricing and Regulatory Affairs
Missouri Gas Energy, Kansas City, MO

FORM NO. 13

P.S.C. MO. No.1 First Revised SHEET No.R-83
Cancelling P.S.C. MO. No.1 Original SHEET No.R-83

Missouri Gas Energy,
a Division of Southern Union Company
Name of Issuing Corporation

For: All Missouri Service Areas
Community, Town or City

GENERAL TERMS AND CONDITIONS FOR GAS SERVICE

13.06 RELIEF FROM LIABILITY: The Company shall be relieved of all liabilities, penalties, charges, payments and claims of whatever kind, contractual or otherwise, resulting from or arising out of the Company's failure to deliver all or any portion of the volumes of gas desired by any particular customer or group of customers to the extent that such failure results from the implementation of the priority of service plan or curtailment procedures herein prescribed or from any other orders or directives of duly constituted authorities, including but not limited to, all regulatory agencies having jurisdiction in the premises.

13.07 PRECEDENCE: To the extent that this Rule 13, or any provision(s) hereof, conflict with any other provision(s) of the Company's filed tariff, General Terms and Conditions for Gas Service, or contracts, this Rule shall take precedence during such period of curtailment.

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ISSUED BY: Charles B. Hernandez Director, Pricing and Regulatory Affairs
Missouri Gas Energy, Kansas City, MO. 64111

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APPENDIX A
PEAK DAY CHRONOLOGY

HIGHLY CONFIDENTIAL

PEAK DAY CHRONOLOGY

MISSOURI GAS ENERGY

Updated: April 7, 1997

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HIGHLY CONFIDENTIAL

Missouri Gas Energy Peak Day Chronology

This document contains a chronology of information and activities utilized by Missouri Gas Energy in forecasting its peak day needs. Because of the dynamic nature of this process, the end results represented herein are subject to change over time. MGE will update this information as conditions warrant.

1989

On December 21, 1989, Western Resources Inc. (WRI) experienced a peak day that generated deliveries of [redacted] Dth[1] on the Williams (WNG) system and coincidental deliveries of [redacted] Dth[2] on the Panhandle Eastern (PEPL) system. The non-coincidental peak on the PEPL system occurred on February 3, 1989, and generated deliveries of [redacted] Dth.

1993

At MGE's request, and based on available data in 1989 that was adjusted for load growth and changes between sales and transportation service, WRI estimated the 1993 Missouri peak day at [redacted] Dth. After adjusting for reductions, new capacity interconnects, minimal load growth, and allowing for a [redacted] overrun, WRI reduced the WNG requirement of [redacted] Dth to [redacted] Dth for purposes of electing Contract Demand levels under WNG's restructured services. TSS capacity was allocated to Missouri at [redacted] and total capacity (TSS+FTS) was allocated at [redacted] generating assignments to Missouri Gas Energy as follows:

TSS Capacity		
	Flowing	[redacted] Dth
	Storage	[redacted] Dth
	TSS Total	[redacted] Dth
FTS Capacity		
	Flowing	[redacted] Dth
	FTS Total	[redacted] Dth
Total Capacity		
	TSS+FTS	[redacted] Dth

[1]Includes Missouri, Kansas, and Oklahoma
[2]Missouri Only

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As the result of elections made by WRI in PEPL's Open Season, the following capacity assignments were made to Missouri Gas Energy:

GDS Service

EFT Flowing	[redacted] Dth
WS Storage	[redacted] Dth
Firm Deliveries	[redacted] Dth[3]

IOS Storage

IOS Storage	[redacted] Dth[4]
Total Deliverability	[redacted] Dth[5]

As the result of a 100% allocation of the Riverside Pipeline Agreement, the following capacity assignment was made to Missouri Gas Energy:

Transportation

Firm Flowing	[redacted] Dth

The level of capacity assigned to Missouri Gas Energy was commensurate with WRI's 1993 peak day estimate of [redacted] Dth that was based on adjustments to the 1989 peak day data.

1994

Prior to the 1994-1995 heating season, MGE felt obligated to validate WRI's peak day estimate using a different strategy. The effort used a monthly base and total methodology where:

total - baseload = heat

heat / monthly heating degree days = heat factor

heat factor x peak heating degree days = peak heat

peak heat + baseload = peak day requirements

When applied to normalized volumes from previous years, this approach produced a peak day requirement of [redacted] Dth, a difference of [redacted]% when compared to WRI's estimate (see Attachment A).

In June of 1994, MGE forecast its peak day capacity needs through the year 2004. The historical study assumed a base peak day volume of [redacted] Dth and an annual escalation factor of [redacted]. In 1996, an incremental peak load of [redacted] Dth was added for Branson,

[3]Total of GDS Service

[4]IOS Storage subject to available IT on peak day

[5]Incorrectly summarized in the March 1993 Supplier Meting handout

Missouri (escalated at [redacted] per year), along with [redacted] Dth of incremental PEPL capacity and [redacted] Dth of incremental WNG capacity. Another [redacted] Dth of incremental PEPL capacity was added in 1999 along with [redacted] Dth of WNG capacity in 2001. The design peak day study assumed a base volume of [redacted] Dth and utilized the same parameters for added load and capacity (see Attachment B). MGE advised the MPSC staff of the forecasted results.

1995

Most recently, MGE analyzed its peak day requirements based on actual experience. On January 4, 1995, Missouri Gas Energy experienced a peak day of 59 HDDs that generated a system demand of [redacted] Dth. The following table illustrates how the current estimates for the historic and design peak day demands were extrapolated.

1995 Peak Day
59 HDDs (Recorded at MCI)

Based on these results, MGE generated a subsequent peak day forecast that covered a time horizon from 1996 to 2006. The historical base volume of [redacted] Dth was approximately [redacted] Dth higher than projected in the June 1994 study and it was escalated at a lower rate of [redacted] per year. This lower escalator resulted from comparing actual customer growth between 1994 and 1995 (Feb-May), and adjusting for customers changing from transportation service to general service as the result of the EGM program.

[redacted] Dth[6] of incremental PEPL capacity was added in 1997, and another [redacted] Dth was added in 2001. Design criteria assumed a base volume of [redacted] Dth and utilized the same parameters for added load and capacity as the historical study (see Attachment C). Although the load curve differs slightly from the June 1994 study, the levels and timing of capacity additions remain consistent with recommendations made by the Reed Consulting Group in their analysis of MGE's capacity needs in February of 1995.

In addition to the above study, MGE has developed recommendations for restructuring its current PEPL portfolio coincidental with adding incremental capacity on the PEPL system. This effort includes an analysis of requirements on historic and design peak days exclusive of other pipeline deliveries (see Attachment D).

On August 7, 1995, MGE completed a follow-up study that also utilized January 4, 1995 volumes as the basis for projecting peak day demand, but differed in that a separate analysis was done at the meter level for each of the three major delivery areas; Kansas City, Joplin, and St. Joseph. Based on historical experience, area totals were escalated at [redacted], and [redacted], respectively, and the results were summed for comparison purposes.

Although the results differed slightly from the original study, they were substantially the same and validated the need for adding incremental capacity in 1997 and 2001 (see Attachment E).

1996

During the process of comparing the 1996 peak day to MGE's historic peak day, certain anomalies in the computations caused MGE to question the accuracy of the 89 HDDs level reported by its predecessor as having occurred on December 23, 1989. After further review, it was determined that the coldest weather actually occurred on December 21, 1989. MGE contacted the forensics department of its weather service, Accu-Weather, Inc., and asked them to provide the high and low temperatures, heating degree days, and the average wind speed that actually occurred during the calendar day (midnight to midnight) and the gas day (7 am to 7 am) for the period December 21 through December 23, 1989. Their research confirmed that the actual peak occurred on December 21, 1989, based on the following information.

December 21, 1989 Calendar Day (12:00 midnight to 12:00 midnight)

High	Low	HDDs	Avg Wind Speed	*Adj HDDs*
-8	-23	81	11	*81*

[6]This [redacted] Dth is the net result of adding [redacted] Dth of new PEPL capacity and renegotiating existing PEPL agreements. These actions must occur simultaneously in order to meet PEPL peak day requirements in the Kansas City Metro area.

December 21, 1989 Gas Day (7:00 am to 7:00 am)

High	Low	HDDs	Avg Wind Speed	*Adj HDDs*
-12	-23	83	14	***85***

Note: Calculated heating degree days are corrected for wind chill ("Adj HDDs") using the following formula - Calculated HDDs + ((Avg Wind Speed - 10 mph) / 2).

Based on this data, MGE assumes that the 89 HDDs reported by our predecessor was incorrect. As a result of having established the proper peak level that occurred during the gas day and in an ongoing effort to improve its forecasting accuracy, MGE will utilize 85 HDDs as its historic peak day for subsequent studies. When applied to previous studies, this modest decrease in HDDs generated less than a one-percent change in forecast demand. The Company's design day standard of 77 HDDs has not changed.

On February 2, 1996, Missouri Gas Energy experienced a peak day of 73 HDDs that generated a system demand of [redacted] Dth. This analysis is viewed as being the most accurate to date because of improved pipeline and LDC telemetry, and MGE's ability to reconcile daily deliveries to customers transporting gas across its distribution system. The following table illustrates how the current projections for the historic and design peak day demands were extrapolated.

In addition to revising its 1997 historic and design peak day demands, MGE has reconfirmed its average annual escalator to be [redacted] based on actual growth between 1994 and 1995 and current marketing projections. The effects of the revised peak day projections are included as Attachment F. This newest study covers a time horizon of 1997 through 2007, and supports the Company's plan to add incremental capacity of [redacted] Dth in 1997.

1997

The peak day for the 1996-1997 heating season occurred on January 10, 1997. The market area experienced 67 HDDs with an average wind speed of 15 mph for the 24 hour period. After applying a standard formula for calculating the effects of wind speed, a value of 70 HDDs was arrived at for purposes of forecasting peak system loads. The following table illustrates how the current projections for the historic and design peak day demands were extrapolated.

The slight difference of [redacted]% in historic peak day projections between the 1996 and 1997 forecasts provides added confidence in MGE's forecasting methodologies. Likewise, this comparison indicated that MGE's average annual escalator of [redacted] continues to be substantially correct. The results of the revised peak day projections are included as Attachment G to this document. This newest study covers a time horizon of 1998 through 2008, and indicates a need for incremental capacity beginning in 2004.

Attachment A

Highly Confidential

Attachment B

Highly Confidential

Attachment C

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Attachment D

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Exhibit A

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Exhibit B

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Attachment E

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Attachment F

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Attachment G

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Appendix B
Contract Briefs

Highly Confidential

file

MEMORANDUM

TO: Missouri Public Service Commission Official Case File
Case No. GO-96-243, Missouri Gas Energy

FROM: Warren Wood WW
Procurement Analysis Department

Reviewed By Carl Lumpe 5/30/97 Penny G Baker 6/2/97
Utility Services Division/Date General Counsel's Office/Date

SUBJECT: Staff's Recommendation in Case No. GO-96-243, Missouri Gas Energy's Reliability Report

DATE: May 30, 1997

The Staff has reviewed the July 1, 1997 through June 30, 1998 Missouri Gas Energy (MGE) Reliability Report as provided by MGE on May 2, 1997. This report was provided by MGE in accordance with the Commission's order of May 21, 1996. The Commission was concerned that the use of the gas cost incentive mechanism that MGE has been approved to participate in has the potential of causing MGE to modify its purchasing strategy too much in favor of short term supply and, thus, potentially jeopardizing gas supply reliability. The purpose of MGE's Reliability Report is to ensure that MGE procures natural gas in a manner consistent with the goal of maintaining gas supply reliability.

GENERAL

Before the Staff provides its recommendation on the substance of the "supply reliability data" that was provided by Missouri Gas Energy (MGE), the Staff believes that it is important to provide some background data associated with the concept of supply reliability. The discussion that follows relates to supply reliability to the firm customers that are dependent upon their Local Distribution Company (LDC) to provide natural gas every day of the year, especially those days in mid-winter when the temperature never rises above 0 degrees Fahrenheit.

It is important to remember that natural gas supply reliability to LDC firm customers is quite different from reliability of service in the telecommunications or electric industry. The consequence of an outage is not usually as extreme in the telecommunications industry. Furthermore, maintaining reliability is a much more dynamic process in the gas industry, involving the coordinated efforts of a diverse group of participants. The differences between natural gas and electricity are more subtle. One of the most important things to remember is that natural gas demand has to be anticipated and ordered (nominated) several days in advance of actual usage to assure delivery when natural gas is needed. This can be attributed to the fact that natural gas in transmission pipelines generally travels at 10 to 20 miles per hour from the production basins in Oklahoma, Texas, and Louisiana. Electricity

in a transmission line travels at a speed of more than 670,000,000 miles per hour. Another important difference between natural gas and electricity is the level of interconnection between transmission systems. Many of Missouri's LDCs receive their natural gas from only one interstate pipeline (or one major interstate pipeline and a secondary pipeline of much smaller capacity). This puts the LDC at the mercy of the reliability of that interstate pipeline that it depends upon. Transmission lines in the electric industry have a significantly higher degree of interconnection that permits ready bypass of problems and immediate delivery of power from distant sources. Basically, the natural gas in your home came from a relatively well defined source and was produced several days, weeks, or months ago. Electricity in your home was generated only seconds ago and could have come from a power plant hundreds of miles away.

Natural gas supply reliability to LDC firm customers can be broken down into the following two primary topics:

I. System Demand Projections
   A. Peak Day Projections
   B. Annual Load Projections
   C. Projected Supply/Transportation Requirements

II. Supply/Delivery Resources
   A. Pipeline Transportation/Storage Capacity
   B. Gas Supply Resources

The focus of the supply reliability data that has been provided by MGE follows along these primary topics. At this point, it is important to note that MGE's supply reliability data only deals with areas of supply reliability that MGE has some ability to control. The following three significant factors that impact supply reliability are, to a large degree, beyond MGE's ability to control:

1. Extreme Weather Conditions

Obviously, LDCs look at historical weather to forecast future demand. How they do this depends on the individual LDC's philosophy. Some LDCs are quite lean (i.e., very low reserve margin) in that they only design for the worst weather they have observed in the last 5 to 10 years. Other LDCs are quite conservative in that they design for the worst historical weather observed in the last 100 years. Generally, the more conservative an LDC chooses to be, the higher the peak day capability per customer will be. Peak day capability per customer has direct fixed cost implications in supply and transportation contract requirements. When extreme weather conditions that go beyond the LDC's designed-for-weather occur, reserve margins in the LDC's portfolio will become apparent and adequacy of emergency curtailment plans will become critical. Weather extremes beyond even the most conservative LDC's designed-for-weather can occur, and it must be understood by all who review reliability data that no absolute guarantee of supply can be granted by any LDC.

2. Extensive Supply Well Freeze-Offs and/or Storm Damage

A prudent LDC reviews the historical performance of its potential suppliers. Extensive and severe cold weather and/or hurricane damage in Texas, Oklahoma, and/or Louisiana could result in many supply contract force-majeure occurrences and the associated supply deficiencies. To the degree that these occurrences cannot be anticipated and designed for, an LDC is "without blame" if it has been prudent in its review of the historical performance of its suppliers.

3. Transmission Pipeline and/or Compressor Station Failures

Where possible and cost effective, an LDC is prudent to contract for supply from several interstate pipelines. This is not only to avoid dependency on one interstate pipeline, but to encourage competition among interstate pipelines and enhance their diversity of supplies. Where access to several interstate pipelines is not an option, transmission pipeline and/or compression station failures could result in immediate supply deficiencies that would be beyond the LDC's control.

INTRODUCTION

Pursuant to the Case No. GO-94-318, Phase II, Report and Order issued on January 31, 1996, Docket No. GO-96-243 was created for the receipt of gas supply reliability and financial incentive mechanism filings. Pursuant to the same Report and Order, a "technical workshop" was held on February 26, 1996. Representatives of Missouri Gas Energy (MGE), the Staff of the Commission (Staff), Union Electric Company (UE), the Office of the Public Counsel (OPC), and the City of Kansas City met on this date and discussed the components of both reliability and gas cost incentive monitoring reports. As a result of these discussions, an outline for MGE's reliability report was agreed to by all parties. Pursuant to the order issued on May 21, 1996, MGE provided a Reliability Report that follows the same outline as was agreed to by all parties on February 26, 1996. The Staff appreciated the "LDC Procurement and Reliability Standards" report prepared for MGE by Reed Consulting Group that MGE provided to the Staff during the "technical workshop." The Staff's response to MGE's Reliability Report follows.

RESPONSES TO SUBSTANCE OF RELIABILITY REPORT

MGE followed the outline that was agreed to in the February 26, 1996 "technical workshop" to convey the information that the Staff requested. The Staff's responses to the information provided in MGE's Reliability Report follow the order of this outline.

I. System Demand Projections

I.A Peak Day Projections

This section details MGE's design and historic peak day demands and how MGE has accounted for these demands in the forecast period.

Staff Response: Adequate

I.B Annual Load Projections

This section details MGE's projected base, high, and low case monthly demands in the forecast period.

Staff Response: Adequate

I.C Projected Supply/Transportation Requirements

This section details MGE's total portfolio of projected demands and the supply, storage, and transportation requirements necessary to meet these demands.

Staff Response: Adequate

II. Supply/Delivery Resources

II.A Pipeline Transportation/Storage Capacity

This section details MGE's pipeline capacity, storage deliverability, and identifies any needs for changes to either in the forecast period.

Staff Response: Adequate

II.B Gas Supply Resources

This section details MGE's existing gas supply contract information as to various terms affecting reliability. Also covered is diversity of supplies, supplier performance data, and identified additional supply needs in the forecast period.

Staff Response: Adequate

III. Summary and Conclusions

This section generally describes MGE's method of projecting system demands and contracting for needed supplies. It also discusses additional actions MGE has taken or will take to ensure reliability of supply, including the administration of the emergency curtailment tariff provisions as needed.

III.A Discussion of Projected Demand and Supply Needs

Staff Response: Adequate

III.B Additional Actions Taken to Ensure Reliability

Staff Response: Adequate

III.C Emergency Curtailment Plan

Staff Response: Adequate

SUMMARY

The Reliability Report that MGE has provided to the Commission generally follows the same type of documentation required by the Iowa Utilities Board. The Iowa Utilities Board refers to this as a procurement plan, and it is part of their annual review of gas procurement practices. Michigan, Minnesota, and Wisconsin also conduct similar reliability assurance reviews.

The Staff's review of the Reliability Report provided by MGE did not indicate that MGE has modified its purchasing strategy to favor short term supply. Although the Staff cannot guarantee the supply reliability of MGE's system, it does appear that MGE has taken extensive steps to ensure that its system provides reliable service to its customers. As the ACA period from July 1, 1997 to June 30, 1998 passes, the Staff is hopeful that MGE will follow the concepts outlined in its Reliability Report and that actual performance at the end of the mentioned ACA period will closely match planned utilization as outlined in this report.

RECOMMENDATIONS

The Reliability Report that MGE provided to the Staff appears to fulfill the purpose of ensuring that MGE procures natural gas in a manner consistent with the goal of maintaining gas supply reliability. It is important to note that actual purchasing practices can be different than planned and, for that reason, the Staff intends to perform an analysis which includes, but may not be limited to, a comparison of planned vs. actual performance.

cc: Director - Utility Operations Division
Director - Policy and Planning Division
Director - Utility Services Division
General Counsel
Missouri Gas Energy - Mike Langston
Manager - Procurement Analysis Department
Office of the Public Counsel
Gary Duffy