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Kansas Corporation Commission
/S/ Susan K. Duffy

BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

IN THE MATTER OF THE APPLICATION OF MIDWEST ENERGY, INC. FOR APPROVAL TO MAKE CERTAIN CHANGES IN ITS CHARGES FOR GAS SERVICE

DOCKET NO. 06-MDWG- 1027 -RTS

DIRECT TESTIMONY OF

MICHAEL VOLKER
MANAGER OF PRICING AND MARKET RESEARCH

MIDWEST ENERGY, INC.

DIRECT TESTIMONY OF MICHAEL VOLKER

Q: Please state your name, position and business qualifications.

A: My name is Michael Volker. I am the Manager of Pricing and Market Research for Midwest Energy, Inc ("Midwest Energy" or the "Company"). In that position, I am responsible for developing gas and electric tariffs including rates, rules and regulations for utility services, measuring customer satisfaction, and developing energy forecasts. I hold a Bachelor of Science degree in Mineral Economics from Penn State University and a Master of Economics from North Carolina State University. I began my career in 1984 as an Economic Analyst with the Federal Energy Regulatory Commission ("FERC"). In 1985, I left FERC and accepted a position with Carolina Power & Light Company ("CP&L") in Raleigh, North Carolina as a Junior Rate Analyst. I remained with CP&L until 1998 and held a number of positions of increasing responsibility in the Rates and Energy Services, Systems Planning, and Marketing Departments. When I left CP&L in 1998, I was the Director of Market Research and was responsible for conducting and managing all qualitative and quantitative market research and for gathering and disseminating competitive intelligence. In 1998, I joined the Boston Consulting Group (BCG) as an Energy Researcher in the Americas Energy Practice located in Atlanta, Georgia where I was responsible for gathering and disseminating Competitive Intelligence and making related recommendations for Energy Practice clients. I joined Midwest Energy in my present capacity in February of 1999. In 1999 I was also named an

Adjunct Professor of Economics and Finance at Fort Hays State University in Hays, Kansas. As an Adjunct Professor at Fort Hays State, I teach Economics courses on a part-time basis.

Q: What is the scope of your testimony in this proceeding?

A: I am sponsoring the following portions of the Company filing: Section 9, Schedules 4 and 5 (summaries of revenue and gas cost adjustments); Section 12, Schedules 3 to 10; Section 15; Section 17; and portions of Section 18. In Section 9, Schedules 4 and 5, I am sponsoring the Annualization, Weather Normalization and Customer Growth adjustments, and I have included a number of exhibits in my testimony in support for those adjustments. In Section 12, Schedules 3 through 10, I am sponsoring all functionalization, classification, and customer class allocation factors used in the cost of service (COS) study that are developed external to the COS model. Schedule 11 in this Section maps the use of all the allocation factors. Section 15 details the results of the COS study and proposed rate changes. Section 17 provides comparisons of unadjusted, adjusted and proposed revenues. Finally, in Section 18, I am sponsoring the edited (redlined), cancelled and proposed tariff sheets including a new Normalized Volume Rider.

Q: What adjustments to the COS are you sponsoring in Section 9, Schedule 4?

A: I have sponsored all the adjustments to the December 31, 2005 test year revenues and gas costs.

The Annualization Adjustment to Revenues and Gas Costs

Q: Please explain the Annualization adjustment.

A: An important principle of ratemaking is the correspondence between costs and revenues for the test period. The purpose of Annualization is to adjust the test year consumption and corresponding booked revenues to reflect the same calendar year as the costs recorded for the test period. Both sales and revenue from rates are based on cycle billed data rather than the calendar year. Essentially, this means that a considerable amount of the revenue or gas costs booked in January of 2006 actually corresponds to consumption that occurred in December of 2005. Likewise, revenue or gas costs recovery booked in January of 2005 corresponds to a considerable amount of consumption from December of 2004. This is particularly significant because the cost of gas consumed in December of 2004 and booked in January of 2005 is significantly different than that consumed in December of 2005 but booked in January of 2006. Exhibit __(Volker-1) illustrates the calculation of the annualization adjustment.

The adjustment to revenues comes in two parts. First, delivery margins are adjusted to reflect the annualized volumes. Approximately two-thirds of the volume consumed each month translates to revenue booked in the next month. The volume consumed one month but booked the next month is estimated by a prior analysis of billing cycles and the average lag between the meter reading date and the billing date (about five days). Typically, the average bill sent each month is based on usage from the tenth day of the prior month through the ninth day of the current month. Assuming linear usage through a month, this means that on average two-thirds of the usage on bills in the current month are based on usage from the prior month. In Exhibit__(Volker-1) column (4), test year volumes are adjusted to remove two-thirds of the volume booked in January of 2005, and add back two-thirds of the volume booked in January of 2006. In this way, all volumes consumed in the test year correspond to all volumes booked in the test year. The delivery portion of revenue is adjusted based on current rates to reflect the differences in calendar consumption versus billing cycle consumption.

In the second part of the adjustment, gas costs and the corresponding pass through revenues are annualized. A blended cost of gas recovery is created based on two-thirds of the gas cost recovery rate in January 2006 and one-third of the gas cost recovery rate in January of 2005. Note that the same adjustment made to gas costs is also made to the revenue recovery since the gas costs annualized here are passed through to consumers via the Gas Supply Cost Adjustment (GSCA). In this way, the gas cost recovery part of this adjustment has no impact on Total System revenue requirements.

The Weather Normalization Adjustment to Revenues and Gas Costs

Q: Please explain the weather normalization adjustment in Section 9, Schedule 4.

A: The second adjustment is the weather normalization adjustment. Like the annualization adjustment, the weather normalization is an adjustment to both the delivery revenues received by the Company and to the gas costs and recovery revenues received by the Company.

Q: Why is Midwest Energy proposing the weather normalization adjustment?

A: The weather normalization adjustment adjusts test year revenues and expenses so that the test year accurately reflects the revenues and expenses that occur under normal weather. The revenues and expenses change because the volume of sales changes with the weather. For example, if the test year winter were colder than normal, there would be more sales of gas for heating and other purposes than in a normal year. Both the revenues and the expenses associated with that higher sales volume would need to be adjusted to reflect normal weather. For the delivery service component of costs, there are no cost adjustments since those costs are fixed. Delivery service rates that contain volumetric charges either over or under recover costs based on the deviations of weather from normal. Since the expectation is that over time weather is normal, weather normalization is critical for matching test period costs and revenues. A normal year is one in which the actual weather experienced is equal to average weather for some period of history. In this case, Midwest Energy has averaged weather data based on 30 years of history to develop the estimate of normal temperatures and precipitation. The weather metrics used in the forecast are heating and cooling degree days (HDD's and CDD's) and precipitation. Heating and cooling degree days represent a measure of how temperature impacts the demand for gas commodity. For precipitation data – which strongly influences sales to irrigation customers – I utilized average county precipitation in Barton, Finney, and Thomas counties.

Q: If the test year is normal, must an adjustment be made?

A: No. But typically, no year is normal including this test year, so an adjustment should be made to ensure that revenues and costs reflect normal weather. Over time, weather and consumption tend toward normal. If normal weather is not utilized in the calculation of rates then there will be a compounding discrepancy in rates for all years these rates are in place.

Q: Has the Commission approved weather normalization adjustments in the past?

A: Yes. The Commission had approved weather normalizations in a number of rate proceedings both for electric and gas companies.

Q: Please explain how the weather normalization adjustment is done.

A: Weather normalization has four steps:

1) Determine the weather metric and how the metric varies from normal in the test year;

2) Determine the sensitivity of usage to unit variations from normal weather;

3) Apply the sensitivity determined in step 2 to the variation from normal determined in step 1 to determine the variation from normal in test year usage; and

4) Adjust revenues and costs to reflect the change in usage due to abnormal weather.

Q: What are the weather metrics?

A: The weather metrics are measures of weather that are utilized to determine normal weather and variation from that. In this proceeding, I use HDDs, CDDs and precipitation.

Q: What is your source for weather data?

A: The source of the weather data is from the Kansas State University Research & Extension service. Both HDDs and CDDs are measured at a Hays weather station while the precipitation data utilized is measured at weather stations in Barton, Finney, and Thomas Counties.

Q: Please explain why temperature data was measured at the Hays weather station.

A: Ideally, the best weather station data to use is that which most closely resembles the actual weather experienced by all customers. Midwest Energy's service territory encompasses a very large geographic area that may experience different weather in one location compared to another. Theoretically, matching weather stations within the Midwest Energy service area to sales in the same area would do a better job of explaining heating and cooling related usage variation than just the Hays station. Unfortunately, to use multiple weather stations, one must have some idea of how much consumption is most closely influenced by the weather measured at that station. In other words, usage data needs to be matched geographically to each weather station utilized. Midwest Energy does not have usage information readily available on a geographic basis. The Hays weather data was utilized because it is the location of the highest concentration of customers (residential primarily) whose usage is sensitive to temperature variation. In short, from both an intuitive and statistically measured standpoint, the Hays weather data works very well in measuring usage variation due to temperature. Further, since we are measuring the marginal impact of weather, it seems reasonable to assume that the changes (as measured by the deviations from normal) in the HDDs and CDDs in Hays are likely to be consistent with other parts of the service area even though the absolute measures differ.

Q: Please explain the calculation of the HDD and CDD weather metrics.

A: HDDs are the measure of how cold a day is. They are calculated by subtracting the average of the daily high and low temperatures as measured at the weather station from 65 degrees, the base temperature. The higher the number of HDDs the colder the day and presumably the higher the consumption of natural gas for heating or any other purpose sensitive to cold. CDDs are the measure of how hot a day is. They are calculated by subtracting 65 degrees, the base temperature, from the average of the daily high and low temperature.

Q: Please explain why Barton, Finney, and Thomas County weather stations were utilized for precipitation data.

A: Precipitation – particularly during certain months of the year – heavily influences natural gas consumption for the Irrigation classes of customers. Like all other classes of customers, Midwest Energy does not have readily available data on the irrigation class to say geographically where the best weather station location is to determine sensitivity. However, it is known that the vast majority of gas-fired irrigation served by Midwest Energy resides in or around these Counties. In contrast, there is almost no gas-fired irrigation in the Hays area. To a much greater degree than temperature – precipitation varies greatly from one station to another. Therefore, it would not make sense to utilize Hays for precipitation data. The average of the Barton, Finney, and Thomas county weather stations was effective in explaining variation in usage by regular irrigation customers. For the Finney County special rate area irrigation customers, only the Finney County weather was utilized.

Q: Were other weather stations considered for precipitation data?

A: Yes. Hays and Great Bend precipitation data were also considered. Neither station was as effective at helping to explain variation in consumption for the irrigation classes.

Q: How was the precipitation data utilized to explain changes in usage?

A: First, the average monthly precipitation of the weather stations was calculated. Monthly "seasonal dummy" variables were created such that seasonal aspect of irrigation and the influence of precipitation could be modeled. Dummy variables use the value of zero or one to identify each month. In this way, the appropriate influence of precipitation in and around the growing season could be determined during the test year.

Q: Please explain how the usage sensitivity to weather is determined.

A: Regression analysis is used to determine the statistical relationship between the weather variables (the independent variables in the regression equation) and the quantity of gas demanded (the dependent variable).

Q: Please explain how regression analysis works and how it was used in this proceeding.

A: Regression analysis seeks to explain whether changes in one or more variables (independent variables) can explain variation in another variable (dependent variable). In this case the dependent variable is the monthly consumption of natural gas for each class of customer. The independent variables are the weather metrics, HDDs, CDDs and precipitation. The use of regression determines the sensitivity of gas usage to changes in the weather.

The regression equation is:

$$Usage_t = c + \beta_0(HDD_t) + \beta_1(CDD_t) + \beta_2(Precip_t) + \ldots + \varepsilon$$

Where $Usage_t$ is the monthly consumption of gas for the class measured in therms per month. HDD_t, CDD_t and $Precip_t$ are the total monthly HDDs, CDDs, and precipitation respectively. The c, β_0, β_1, and β_2 are the regression coefficients. The +... after the Precip variable signifies that there could be other variables utilized to explain usage in the regression equation but for the purposes of weather normalization they are not relevant. The constant term, c, indicates how much gas would be consumed if the HDDs, CDDs, Precip and any other variable in the regression equation were all zero. The Beta terms, β_0, β_1, and β_2, are the sensitivity terms which measure how much consumption changes if HDDs or CDDs increase by one degree day or if Precip increases by one inch. The ε term at the end of the equation signifies the error in the regression model.

Q: What estimation method was used to determine the Beta coefficients for the weather variables?

A: Ordinary Least Squares (OLS), a basic statistical technique, was utilized to estimate the Beta coefficients.

Q: Does OLS do a good job estimating sensitivity to weather?

A: Overall, OLS does a very good job estimating the beta coefficients and determining sensitivity to weather for those classes of customers that are sensitive to temperature or precipitation. It has been utilized for this purpose in countless dockets for gas and electric utilities both in Kansas and across the country.

Q: Which customer classes had test year usage that was sensitive to weather?

A: The Residential classes (M, K, and T Systems), Commercial classes (M, K, and T Systems), Industrial Classes (K System), and Special Contracts were all influenced by weather as measured in HDDs. The Industrial Classes (K System) were also influenced by weather as measured by CDDs. The Irrigation classes (K System) were influenced by the weather as measured by Precip.

Q: What were the results of the estimations?

A: Estimation results are summarized in Exhibit __(Volker-2).

Q: Please explain what these numbers mean.

A: The numbers in columns 1, 3, and 5 are the sensitivities of class usage to a unit change in the independent (weather) variable. For example, for the residential class on the M System, an additional Heating Degree Day will mean an additional 1,212 therms of gas consumption. Likewise, for an additional Cooling Degree Day, usage in the retail industrial class on the K System will increase by 88 therms. Finally, for one additional inch of rain, irrigation natural gas usage by retail K System customers will decrease by 69,918 therms.

Q: What is the T-Stat in columns 2, 4, and 6 of Exhibit__(Volker-2)?

A: The T Statistic is a measure of statistical significance. In other words, are we confident that the actual values of the regression coefficient are significantly different than zero? Or more directly – do the weather variables examined explain variation in the dependent variable (usage)? A rule of thumb (based on the Student's t Distribution Table) is that a regression coefficient is statistically significant if the absolute value of its T Statistic is greater than two. The beta coefficients examined have T Statistics with absolute values well over two except those measured for the Finney County special rate area. Although the Finney County irrigation classes were not strongly statistically significant in terms of the rule of thumb, they were still significant. Further, the results for the Finney County irrigation classes are consistent with the results from the regular irrigation classes. It should be noted that with relatively little Finney County system history, statistical significance of weather coefficients is likely to be lower. Nonetheless, the results were consistent with the results for the regular irrigation classes.

Q: Do your regression models provide a measure of the proportion of the variation in the dependent variable explained by the independent variables?

A: Yes. For each class the R square provides a measure of the proportion of the variation in the dependent variable explained by the independent variables. The R square values are reported for each class in column 7 of Exhibit___(Volker-2).

Q: What is the total Weather normalization adjustment to sales volumes?

A: Exhibit__(Volker-3) shows how the weather sensitivities were combined with the variance from normal weather to create a class-by-class adjustment to sales volumes. The statistically derived sensitivities are simply multiplied by the test year difference from normal for each of the weather variables to derive the sales volume adjustment for each customer class.

Q: What are the Weather Normalization Adjustments to revenues and gas cost?

A: Exhibit__(Volker-4) shows how the weather normalization revenue and gas cost adjustments are created from the adjustment to sales volumes. It is important to note that the Revenue adjustment contains two parts: the adjustment to delivery revenues and the adjustment to the gas cost pass through revenues. An adjustment is made to gas cost that is equal to the gas cost pass through portion of revenue. Similar to what was done in the Annualization Adjustment, making the same adjustment to gas costs as to gas cost recovery revenues assures that at the System level gas costs will match gas cost recovery revenues.

Customer Growth Adjustment to Revenues and Gas Costs

Q: Please explain the Customer Growth adjustment in Section 9, Schedule 4.

A: The purpose of the Customer Growth adjustment is to adjust test year revenues and gas costs to reflect the end of test period number of meters. By so doing, the test period is annualized for the Company's end of test period customer count.

Q: How is the Customer Growth adjustment calculated?

A: The Customer Growth adjustment is calculated in four steps. First changes in average customer meters are calculated between the test year and the year prior. Second, that calculated change is divided by two and added to the test year average meters to give a new meter count reflective or the end of test period number of meters. Third, volumes are annualized to reflect the updated number of meters. Finally, gas cost and delivery revenue changes are calculated to reflect the change to meters and volumes.

Q: Please explain each step of the adjustment.

A: The adjustments to the number of meters and volumes are illustrated on Exhibit_(Volker-5). In the first step, the average monthly meters for each rate class for the test year Column (1) were compared to the average monthly meters for each rate class in the prior year Column (2). Assuming linearity, the average number of customer in any year means the number of customer meters as of June 30th of that year. Therefore, the difference between the two yearly averages is the meter growth from June 30th of the prior year through June 30th of the test year. To update meter count to the end of the test period, I have added one-half of the average annual meter change as calculated between the test year and the prior year Column (3) to the average meters in the test year. The resulting value Column (4) reflects the end-of-test-period average meter count. This method assumes constant growth for year over year.

Q: Why not just use the meter count in December of the test year as the basis for the Customer Growth adjustment?

A: There is seasonality in meter connections. For example, there were more customers in December than June for the K System Residential class each of the last four years. Yet, the average number of K System residential customers declined each of those years. Because of seasonality, end of year customer counts are not reflective of the average number of meters throughout the year.

Q: Please explain the next step of the customer growth adjustment.

A: Once there is an adjusted average annual meter count, the volumes in each rate class need to be adjusted to reflect the changed number of customers. On Exhibit__(Volker-5) Column (6), I have calculated the average usage per meter in each rate class based on the weather normalized volumes in Column (5). Column (7) calculates the volume adjustment by multiplying the change in customer meters times the average use per customer. The calculation assumes that additional or lost customers use equals the average of existing customers.

Q: Please explain the last step of the customer growth adjustment.

A: Changes in the delivery revenue and gas cost (pass through) revenue are calculated on Exhibit__(Volker-6). The Customer Growth adjustment to meters and volumes, the billing determinants, are multiplied by the delivery rate customer charge and volumetric charge respectively. The sum of these two is the Change in Delivery Revenue, Column (5). Also, an adjustment is made to gas cost that is equal to the gas cost pass through portion of revenue. This is consistent with the adjustments made in the Annualization and Weather Normalization Adjustments, and ensures that gas costs are matched by gas cost recovery revenues.

Q: In addition to adjusting customer meters and volumes to reflect the end of period average meters, do Customer Growth adjustments sometimes reflect changes in the average usage per customer?

A: Yes. Customer Growth adjustments are often done in two separate parts, the first reflecting the trend in customer meters, the other reflecting the trend in usage per customer.

Q: Why have you not adjusted volumes for a customer growth change in usage per customer?

A: There are many variables which drive changes in customer usage including weather, price, appliance efficiency, and income just to name a few. Test year volumes are already adjusted for weather. It is difficult at best to distinguish between the impacts of some of these usage-driving variables. Later in my testimony, I have proposed a Normalized Volume Rider that holistically examines changes in volumes compared to the test year. As will be discussed later, this rider makes a customer growth adjustment associated with a change in average usage unnecessary.

<u>Other Revenue and Gas Cost Adjustments</u>

Q: In addition to the Annualization, Weather Normalization, and Customer Growth Adjustment, what are the other revenue adjustments you are sponsoring?

A: I have removed interdepartmental revenues, forfeited discounts, unbilled gas revenues, and revenue associated with services provided to the city-owned gas system of Bunker Hill. The purpose of these adjustments is to back out non-operating revenue. In addition, I adjusted revenues for the Finney County rate class to reflect that the vast majority of the customers in that rate class have switched to the Finney County Special Contract approved in Docket No. 05-MDWG-767-CON. The purpose of this adjustment is to shift revenues from the Finney County rate class to the Special Contracts class such that these rate classes accurately reflect one full year's existence of the contract.

Q: In addition to the Annualization, Weather Normalization, and Customer Growth adjustments, what other Gas Cost adjustments are you sponsoring?

A: Related to the adjustment to reduce revenues for the services provided to Bunker Hill, I have similarly adjusted associated gas costs. I also removed the line loss penalty attributable to line losses above four percent on the M System from gas costs. Finally, I removed unbilled wholesale gas similar to removing unbilled gas revenues on the revenue side. Again, the purpose of these adjustments is to back out non-operating expenses associated with natural gas delivery service.

Allocation Factors

Q: Please briefly describe the cost of service ("COS") model used in Section 12 of this application.

A: The cost of service model is a proprietary software model tailored for Midwest Energy's use. The model fully supports functionally unbundled rate designs and uses available Company cost data to develop the unbundled cost by specific function. By functionally unbundled, I mean the complete separation of costs into functional components. Midwest Energy has defined its functional components as: Production, Transmission, Balancing, Distribution, and Onsite. The test year utilized for this preceding is the calendar year of 2005.

Q: Please explain how the cost of service model (COS) works.

A: The COS model follows the traditional three-step process: functionalization, classification, and allocation. First, all inputs (rate base, expenses, and revenues) are divided into the functional components noted above. Unlike traditional models, the COS model does not depend solely on FERC account codes to functionalize inputs. Instead, the model functionalizes the appropriate account items through the use of allocation factors derived from more detailed information. Once functionalized, items are classified into demand, energy, or customer components. Finally, the classified components are then allocated to customer rate classes based on the cost causing characteristics of each customer class.

Q: What are the advantages of a functionally unbundled cost of service model?

A: For Midwest Energy, this allows for a better separation of the two basic components of rates – gas cost recovery and delivery. The gas cost recovery component is the cost of the physical commodity and its delivery to the Company's System. The delivery component is the cost to Midwest Energy to provide utility delivery service. For all sales classes of customers, the major portion of gas costs, the physical commodity, is adjusted monthly in PGA filings. Charges for upstream capacity, the cost of getting gas to the Midwest Energy distribution system, is adjusted annually as are any remaining gas cost items including the over or under recovery component carried over from the preceding PGA year. In this way, prudently incurred gas costs are a pass-through to Midwest Energy's customers. With a fully unbundled COS study, the allocation of costs such as balancing, storage or upstream capacity can be based on cost causation principles and may change the upstream the shares of each rate class. Unlike gas costs, the delivery component is only adjusted up or down during a general rate case such as this proceeding. Since the nature of these costs and the way they are recovered through rates is very different, especially for sales customer compared to retail customers, it is very important to unbundle them carefully.

Functionalization Allocation Factors

Q: How are components of the COS allocated to each function?

A: Functionalization is the process of assigning portions of rate base, revenues and expenses to the five functional components: Production, Transmission, Balancing, Distribution, and Onsite. Approximately 30 allocation factors have been derived either exogenous to the COS model or within the model itself. The functional allocators are listed in Section 12, Schedule 8 with a brief description and the percent of the allocation to each of the five functions.

Q: How are the functionalized components classified?

A: Classification is the process of further breaking down functionalized components into demand, energy, or customer classifications. Approximately 60 classification allocators have been derived either exogenous to the COS model or within it. The classification allocators are listed in Section 12, Schedule 9 with a brief description and the percent allocation to each of the three classifications.

Q: After rate base, expense, and revenue data have been functionalized and classified, how are they allocated to each customer class?

A: Class allocation is the process of allocating classified components to rate classes. Approximately 190 customer class allocators have been derived either exogenous to the COS model or within it. The classification allocators are listed in Section 12, Schedule 10 with a brief description and the percent allocation to each of the customer classes.

In addition, Section 12, Schedule 11 is a map that summarizes the complete functionalization, classification, and class allocation factors line by line through the COS study. The map is organized with the amount to be allocated, and the functional allocator on each page. For each function, the classification allocators are listed. Finally, for each classification in each function, the customer class allocators are listed.

COS, Revenue Requirements, and Proposed Revenues

Q: Please summarize the results of the COS study.

A: The third and final phase of the COS model, the class allocation phase, is summarized in Section 15, Schedule 1. This schedule shows for each rate class, the line by line results of the pro forma COS study including detailed rate base items, expenses, revenues, net income, and rate of return ("ROR") at current rates.

Q: What are the Revenue Requirements by Rate Class in Section 15, Schedule 2?

A: Based on the COS study results as illustrated in Section 15, Schedule 1 and the ROR requirements as presented by Company witness Thomas Meis, the Revenue Requirements by Rate Class are calculated in Section 15, Schedule 2. It is especially important to note that these revenue requirements are those that would result from all rate classes providing the same ROR on allocated rate base.

Q: Are these the Rate Class Revenue Requirements that the Company is proposing?

A: No they are not. The COS study with equalized RORs is a starting point on how the Company should meet its total revenue requirements, but there are a number of reasons to vary the ROR for each rate class. These include:

1) Different risks associated with serving different classes of customers;
2) Competitive issues;
3) Mitigating rate change impacts;
4) Administrative simplicity; and
5) Social policy.

These issues have been taken into account when designing proposed rates.

Q: Please discuss Midwest's rate design objectives.

A: Midwest has designed rates to meet a number of objectives:

1) The designs must provide enough revenue to meet the Company's revenue requirement as derived in the COS model;
2) The designs should move toward the class COS results;
    a. Fixed charges in total are targeted to be at least 75 percent of the COS fixed costs and each rate schedule should have a minimum of 60 percent of fixed costs recovered by fixed charges.
    b. Class ROR should be closer to the System ROR than previous rates.
    c. There should be no negative class RORs.
3) The designs should simplify administration by combining rates classes where practical; and
4) Impacts on classes should be minimized to the greatest extent possible.

a. No rate class should face a rate increase more than double the system-average rate increase.

b. No decrease in delivery rates for any class.

Q: Do the recommended rate designs meet all of the Company's objectives?

A: No. Achievement of one objective can compromise the achievement of another. For example, it may be impossible to have a positive ROR for a rate class without having an increase in rates that is more than double the system average rate increase. Therefore, judgment was used to balance diverging principles.

Q: Do the recommended rate designs provide enough revenue to meet the System revenue requirement?

A: Yes. Section 15, Schedule 3, illustrates the total revenue requirement based on the COS study as well as the unbundled revenue resulting from the proposed rate designs. Proposed rates yield revenues within one thousand dollars of matching the COS based revenue requirement. In the first two pages of this schedule, proposed delivery rates are used to calculate proposed delivery revenue. This is compared to current delivery revenues to show delivery revenue changes.

Q: Please discuss how the delivery rate designs bring rates closer to the second rate design objective, moving closer to the COS results.

A: Delivery rates are brought closer to the COS in three ways: first, customer charges have been increased such that every rate class except one is paying at least 60 percent of its fixed costs in the form of fixed charges. Second, just short of 75 percent of the COS costs classified as "Customer" (i.e. fixed costs) would be recovered through customer charges under the proposed rate design. Finally, the RORs for each rate class are positive. In three instances, individual rate schedules have a negative ROR under proposed rates (for example, the K System Industrial Sales schedule), but when the combined rate class is examined, none provided a ROR that is less than 60 percent of the system required ROR. Using the same K System Industrial Class example, the ROR for the combined Industrial Sales and Industrial Transport rate schedules is 5.8 percent. The negative ROR in the Sales schedule is more of a function of a small number of large customers that shift between sales and transportation schedules during the test year. Therefore, in this case, analysis of the proposed rates is more appropriate by looking at the combined industrial sales and transport rate schedules rather than the individual rate schedules.

Regarding the recovery of customer-classified costs via customer charges, virtually everyone agrees that most delivery service costs are not sensitive to changes in volume, but rather are fixed in nature. Yet a considerable portion of delivery service revenue is based on volume. From an economic standpoint, this leads to inefficient consumption decisions because of poor price signals. From a utility standpoint, it leaves an excessive portion of the revenue subject to seasonal usage and weather. From a customer perspective, particularly a residential customer, it makes bills in high consumption months even higher than they should be.

Section 15, Schedule 4, provides the unit cost of service based on the COS study results. On rows 33 through 35 of the schedule, I've made comparisons between the fixed component of rates and the proposed customer charge. Based on the unit cost results, it is evident that the proposed rates are moving revenue recovery in the direction of cost causation.

Q: Have you proposed any changes to rate design for the irrigation classes?

A: Yes. We propose to implement a seasonal rate design both for delivery charges and for upstream pipeline capacity allocation applicable to irrigation classes. The upstream capacity allocation and higher seasonal rates would apply during winter billing months of January through March. Currently both sales and transport irrigation customers pay a monthly customer charge and a flat, year-around volumetric delivery charge. Furthermore, no upstream capacity costs are presently allocated to irrigation customers.

Q: Why are you proposing these changes?

A: There are two reasons. First, even though an irrigation system may not be operating on the coldest day of the winter, i.e., the peak day, we have found that many operate at some time during the winter season. Therefore it is appropriate that some upstream capacity costs should be borne by this class. The second reason is that Midwest Energy has a number of "combined-class" irrigation meters. These are meters whose throughput is primarily for irrigation; however, the customer may also be using the same yard line to provide gas to a home or shop. If a combined-class meter has winter load characteristics similar to a stand-alone residential service, it should pay similar charges for that portion of use.

Q: Please provide some background on this situation.

A: Since it involves irrigation, the combined-class issue is a rural phenomenon. In these areas, customer yard lines can be quite long, up to one and one-half miles in some cases. Prior to Midwest Energy's acquisition of its Kansas distribution system in 1998, KN Energy had allowed customers to connect two different classes of service to a single yard line. Presumably, one of the reasons for this would have been to limit customers' investment by avoiding construction of multiple yard lines. This would have been particularly important if the Company's gas main was a significant distance from the actual points of use.

Q: What types of problems does the presence of combined class meters create?

A: I'll answer that question in terms of the combination we believe is most prevalent, which is when both a house and an irrigation well are combined behind a single meter. Assuming an irrigation rate is being applied to the combined throughput, the customer avoids the monthly customer charge for the residential service. At the current charge of $10.00 per month per residential meter, that is $120 per year. In addition, as long as Midwest Energy does not allocate upstream capacity costs to irrigation accounts, the customer avoids the capacity costs normally paid by residential customers for that portion of the combined use. On the K System where nearly all of these instances would occur, upstream capacity costs exceed $2.00 per MMBtu. At a normalized annual use of 826 therms per residential customer on the K System, that amounts to at least $165 per year. Finally, the current volumetric delivery rate for irrigation is lower than for residential use by a magnitude of 32 to 42 cents per MMBtu, depending on whether the irrigation use is sales or transportation service. Again at the average K System residential use, that is another $26 to $35 of charges that such a residential customer avoids. In total, the benefit amounts to a difference in excess of $200 per year compared to other residential customers.

Q: How many combined-class meters does Midwest Energy serve?

A: We have not performed a field audit to determine an exact number. However, through analysis of billing history, we believe the number of combined irrigation-residential meters could approach 500.

Q: How did you make that determination?

A: We made a query of the billing history for all irrigation accounts for the calendar years of 2003-2005 and eliminated all records except for the billing months of December through April. Those records generally represent actual use during the months of November through March, or the coldest period of the year. Next, we sorted the data to find any month of zero consumption. Since a residential customer would nearly always consume gas during the winter, a service with one or more months of zero use would probably be used strictly for irrigation. We found 475 meters that did not have any months of zero use. In other words, these meters measured gas use during every winter month for three years. Our conclusion is that most of these meters probably serve a residence or other heating load in addition to the irrigation load.

Q: What are you attempting to achieve with this proposal?

A: This is a customer equity issue. Any prudent cost that can be avoided by one group of customers becomes the burden on others. We believe our proposal explained below in more detail helps achieve a greater level of equity among residential gas users.

Q: Does Midwest Energy receive any benefits if combined-class meters are allowed to exist?

A: Yes, there are some benefits to both Midwest Energy in the form of avoided costs for meters, meter reading and billing. There are also benefits to customers via avoided duplication of yard lines. Our proposed rate design changes make a move toward greater customer equity by addressing the two cost categories recovered with volumetric charges. That is, we are proposing changes to the delivery rate design and changes to the upstream capacity cost as flowed through the Gas Supply Cost Adjustment ("GSCA").

Q: Looking first to upstream capacity costs, does Midwest Energy presently allocate upstream capacity costs to irrigation customers?

A: No. This was based on the generalization that most irrigation occurs during the summer, therefore capacity was only allocated to classes that were likely to use gas during peak winter periods.

Q: Is this true for only the irrigation class?

A: No. K System Irrigation and Industrial classes are not allocated any upstream capacity. The grain dryer class is allocated upstream capacity costs equal to 50 percent of that charged to other sales classes. It is worth noting that there are no combined-class issues with industrial customers. As mentioned earlier, this is a problem unique to rural areas and primarily applicable to the irrigation class.

Q: Are upstream capacity costs allocated to transportation customers, that is, customers that procure their commodity supply through an unregulated gas marketer?

A: No. Midwest Energy only allocates upstream capacity costs to its sales classes.

Q: Are you recommending tariff changes to address this upstream capacity issue?

A: Yes. In the last section of my testimony, I address proposed tariff changes including a recommended change to the GSCA tariff that will help offset the upstream capacity currently being allocated to classes other than K System Irrigation, Industrial, or Grain Drying classes.

Q: Turning to the question of avoided distribution commodity charges for residential service behind an irrigation meter, how do you propose to address that?

A: I have recommended a seasonal rate design for the K System Irrigation Sales and Transport classes to address domestic usage during winter months. During the billing months of January, February, and March, both Irrigation rate schedules will have volumetric delivery rates equal to the residential rate. As proposed, that means that Irrigation customers would pay volumetric delivery rates of $1.54 per MMBtu during the three winter months and $0.88 per MMBtu during the non-winter months.

Q: What would the customer charge be to the Irrigation classes?

A: The customer charge would not change during the winter months. In other words, the fixed costs attributable to the Irrigation classes still needs to be paid, but the volume associated with non-irrigation use in this class will now at least be recovered through non-irrigation volumetric rates. However, combined-class customers still receive the advantage of a single customer charge – albeit they will pay the higher customer charge year-around.

Q: Please discuss rate design issues for the Finney County irrigation class.

A: In Midwest Energy's last general rate case, Docket Number 02-MDWG-922-RTS, there was considerable effort spent discussing appropriate allocation of costs to the Finney County Special Rate Area. The customers included in this area had paid Midwest Energy the costs of construction of the distribution system to serve the area with the understanding that construction costs of the system would not be included in rates. This made for extensive discussion regarding how to allocate operational, maintenance, and administrative costs to this special rate area in Finney and Kearny counties.

All parties agreed that typical the typical ratemaking process does not readily apply under the circumstances of the Finney County special rate area. With the input of Staff and the Kearney County Irrigation Association (the majority of the customers), a special contract was developed and approved by the Commission in Docket Number 05-MDWG-767-CON. This contract provides for automatic inflation-tied rate adjustments for the contract period (10 years), thereby negating the need for extensive discussion in this rate proceeding. It is worth noting that over 95 percent of the accounts in the special rate area adopted this agreement. For the few accounts remaining on the special rate area tariff, I have proposed the average delivery rate increase applied to all other rate classes including both customer and volumetric delivery rates.

Tariff Changes

Q: Please discuss all tariff changes you are sponsoring.

A: I am sponsoring all of the proposed changes to the tariff sheets in Section 18, the edited (redlined) and proposed tariff sheets including the new Normalized Volume Rider. The first changes are to the Master Tariff on Index numbers 10 and 11. The Master Tariff is the Rate Schedule Summation Sheet and contains the proposed rates by rate schedule. Second, I am sponsoring the changes to the Gas Supply Restructuring Adjustment Tariff sheets (Index numbers 16 and 17). The Company has completed all restructuring obligations on the M System and therefore this tariff is no longer necessary. It is being cancelled with the Index numbers reserved for future use. Third, I am sponsoring changes to the M System High Load Factor schedules, both Sales and Transportation schedules. These are renamed as Oil Field Service rates since almost all the customers on these rates are oil field customers. Currently, only four accounts of 184 are not oil field accounts. The reason for this change is that over time, the cost of service to oil field customers has changed such that there are significant differences between the oil field and other high load factor customers. Therefore, the HLF tariffs - index numbers 33 and 46 for Sales and Transportation schedules, respectively - have been modified to include only Oil Field customers and are so named as the Oil Field Sales ("OFS") and Oil Field Transport ("OFT") Tariffs. The other four accounts will be migrated to the Commercial Sales Tariff for M System customers.

The fourth adjustment I am sponsoring is being made to the Gas Supply Restructuring Adjustment (Index No. 54) to reflect changes to the "Delivery Cost Component".

Q: Please elaborate on your proposed changes to the Gas Supply Cost Adjustment sheets.

A: As discussed in the COS, Revenue Requirements, and Proposed Revenues section of my testimony, there is a misallocation of upstream capacity costs when there is winter consumption by non-capacity paying rate classes.

Q: What is your proposal to fix the misallocation?

A: I am proposing that sales classes not paying upstream capacity charges pay full capacity charges during the billing months of January, February, and March. In this way, all classes of customers that utilize upstream capacity during the peak months will be assessed some capacity during those months. Combined-class accounts that in the past have been able to unfairly escape upstream capacity charges will now pay recovery of these costs at least during the winter cost-causation period. It is worth noting that over 50 percent of all residential consumption occurs during the billing months of January, February, and March. Therefore, to a large degree, residential customers who have been escaping upstream capacity charges via combined classes will now pay the majority of the upstream capacity costs attributable to them through this tariff change. The redlined and proposed versions of the Gas Supply Cost Adjustment tariff sheets are included in Section 18 of this filing.

Q: What other tariff changes are you proposing?

A: Finally, I am sponsoring the new Normalized Volume Rider ("NVR").

Q: Why is Midwest Energy proposing an NVR?

A: The NVR helps preserve the margins needed to fund capital investment as recognized by the Commission authorized ROR, and at the same time protects customers from paying for a higher ROR than necessary. The NVR implicitly recognizes that normalized consumption for the historic test year will not equal the actual consumption for the rate effective year (the first twelve months new rates are effective). In the absence of an NVR mechanism, the Company bears a financial burden and risk because of factors such as increasing appliance efficiency, energy conservation (including Company-sponsored programs), water conservation, high gas commodity prices, and abnormal weather. It is also worth noting that by preserving the Commission authorized ROR, the NVR reduces the need for expensive rate proceedings.

Further, in recent years Midwest Energy's customers have experienced declining usage per customer. As a point of reference and mentioned in Mr. Lehman's testimony, residential usage per customer has declined at a 2.2 percent per year rate since 1999. Similarly, commercial and industrial usage per customer has declined 4.3 percent per year while irrigation usage per customer has declined 8.9 percent per year since 2000. These changes in per customer usage are not offset by declines in fixed delivery system cost, highlighting the need for the NVR.

Q: In an environment of changing usage per customer, what rate options are available to the Company to ensure that it achieves the margins necessary to prudently fund capitol investment?

A: Since delivery system costs generally do not vary with level of volumes, cost recovery needs to be likewise "insensitive" to volume level. The first way to achieve that is by designing delivery rates almost exclusively based on customer charges. Alternatively, a mechanism such as the NVR that adjusts volumetric recovery rates consistent with changes in actual volume (compared to the normalized test year) will also decrease the Company's sensitivity to nominal volume changes.

Q: Please explain the proposed NVR.

A: The NVR provides a mechanism to mitigate the earnings impact of volumetric delivery rates for variances from the normalized test year volumes used to set the rates. It provides an automatic adjustment mechanism to volumetric delivery rates consistent with the volumetric billing determinant upon which the rates were originally based.

Q: How does the NVR work?

A: The NVR works as an adjustment to delivery rates by creating a positive or negative adjustment to volumetric delivery rates based on the billed volumes from the normalized year. It is similar to Weather Normalization riders previously approved by the Commission that automatically adjust rates for variances from normal weather. However, unlike a correction for abnormal weather, the NVR does not attempt to distinguish between the specific causes of deviations from normal volumes. For example, throughput was likely lower in 2005 because of much higher gas prices, very mild heating season weather, negative customer growth, increased energy conservation, and perhaps a number of other reasons. The NVR adjusts revenue impacts related to weather, conservation, and any other impact on volume. The NVR effectively decouples fixed cost revenue recovery from volumetric charges without establishing customer charges that would be necessary if all fixed costs were recovered in customer charges. If gas prices are lower in future years, and weather is normal, or other consumption drivers push higher levels of consumption, then volumetric delivery rates will be higher than they need to be. The reverse could also be true. With the NVR, volumetric rates will be adjusted each year to reflect for variances from test year volumes for each rate class. The adjustment causes the elimination of any impacts associated with estimating errors in the volumes used to set rates.

Q: What are the advantages to the NVR?

A: There are at least four advantages to the NVR:

1. The NVR will reduce the disincentive that the Company experiences regarding investment in energy conservation;
2. The NVR will reduce the need to raise fixed charges as much as would otherwise occur;
3. The NVR is simple to calculate;
4. The NVR does not target low-volume consumers for an increasing share of revenues.

Q: Please discuss how the NVR will reduce the disincentive regarding investment in energy conservation.

A: Currently, because delivery costs are mostly fixed in nature while recovery includes a relatively large volumetric portion, any activity that results in reduced volumes hinders the utility in terms of cost recovery. This is exactly what happens when a utility invests in energy conservation programs for customers. These programs, from high efficiency appliances to energy audits, result in lower volumetric consumption than would otherwise occur. The July, 2005 edition of Public Utility Fortnightly discusses this conundrum in detail and makes a strong case for decoupling delivery revenue from volumes.

Q: Why does the NVR reduce the need to raise fixed charges?

A: Although I have proposed increases in most customer charges that are proportional to the overall increase in delivery rates, in most rate classes I have not gone as far as the classified COS results suggest. This is in recognition that customers are reluctant to immediately change to a rate structure that is dominated by fixed charges – even if that is economically efficient rate design. While not as economically efficient as raising fixed charges to appropriate levels, an NVR at least makes lost volumes less of a financial burden to the local utility thereby, reducing the need to increase fixed charges. Further, the NVR would be more acceptable to customers than high customer charges.

Q: Please explain the simplicity advantage of an NVR.

A: A considerable amount of time has been devoted to this and other rate filings regarding weather normalization for the purpose of normalizing test year volumes. If a weather normalization rider is in effect, separating the impact of weather from other drivers of consumption is not perfect. The NVR is simple. If volumes (per customer) are higher during the year than the normalized test year, the NVR will yield an appropriate credit back to customers in the next year. If volumes were lower than the normalized test year volumes, then volumetric delivery rates would be appropriately increased to reflect the need to recover volumetric delivery rates consistent with the test year basis for those rates. In the case where an NVR is positive, the small increase to a customer to recover fixed cost is more than offset by the lower utility bill the customer had from the reduced gas commodity cost on their bill. There is no need to focus on a specific driver of energy consumption, and no need to separate the impact of any driver of energy consumption.

Q: Please discuss the impact of the NVR on low-income consumers.

A: Whether correct or not, the perception exists that low-income consumers are also low-volume consumers. Hence, the argument that increasing the percent of delivery revenue recovered from fixed charges disproportionately impacts low-income customers. By adopting the NVR, the burden of volumetric recovery of fixed costs remains volumetric in nature. Therefore, low-volume consumers need not face an increasing share of the delivery-cost burden.

Q: Has the Commission approved volumetric rate adjustment mechanisms before?

A: Yes. For example, Kansas Gas Service has Commission approved volumetric rate adjustment mechanisms associated with abnormal weather ("Weather Normalization Adjustment Rider") and a mechanism to adjust volumetric charges for differences from test year ad valorem taxes ("Ad Valorem Tax Surcharge Rider"). In addition to adjustments for consumption drivers such as weather, some state utility commissions have approved recovery of revenues lost as a result of demand side management and conservation programs. Further, still other states are recognizing the importance of decoupling volumes from financial performance through other mechanisms to recover revenue lost by declining volumes.

Q: Please explain how the NVR will be calculated.

A: Exhibit__(Volker-7) shows a sample calculation for each rate class. In this example, I have used the test-year normal volumes and proposed volumetric delivery revenues and compared them with the delivery revenues that would have occurred in the test year at the proposed rates with volumes unadjusted. There are a few important things to note regarding NVR calculations: first, for the purposes of a volumetric rate adjustment, rate classes have been combined. For example, for the purposes of an NVR calculation Irrigation Retail and Transport classes are combined such that migration between rate classes does not unduly influence the calculation of the NVR. The second point to note is that the calculation of the NVR is done on a use per customer basis only. The point of this adjustment is not to adjust volumetric revenue recovery because of changes in the number of customers, but rather to adjust volumes because of changes in average usage per customer. As alluded to in the Customer

Growth section of my testimony, this adjustment to usage per customer on a prospective basis makes the backward looking usage-per-customer part of a customer growth adjustment unnecessary.

To calculate the NVR for each rate schedule, a comparison of the normalized test year volumetric delivery revenues per customer (by class) is compared to the sample year delivery revenues per customer, Column (5) and Column (7) on Exhibit__(Volker-7). Then, the per customer delivery revenue over or under recovery is divided by the normal use per customer to yield the volumetric adjustment necessary – the NVR. This calculation by rate class is conducted in Column (3), beginning on row 48 of the exhibit. Although illustrated as an annual adjustment, the Company would track the over or under recovery of volumetric delivery rates on a monthly basis and if circumstances warranted would propose updates to the NVR more frequently with Staff approval.

Q: Does this conclude your testimony?

A: Yes.

STATE OF KANSAS)
) ss.
COUNTY OF ELLIS)

AFFIDAVIT OF MICHAEL VOLKER

Michael Volker, being first duly sworn, deposes and says that he is Manager of Pricing and Market Research for Midwest Energy, Inc., and that the statements contained in the direct testimony which he is sponsoring in this Docket were prepared by him and are true and correct to the best of his information, knowledge and belief.

Michael J. Volker

Michael Volker

Subscribed and sworn to me this 21st day of March, 2006.

Nancy M. Urban

Notary Public

NOTARY PUBLIC - State of Kansas
NANCY M. URBAN
My Appt. Exp. 7-11-09

My Commission Expires:

7-11-09

Exhibit __(Volker-1)

MIDWEST ENERGY, INC
GAS SYSTEMS
TEST YEAR ENDED DECEMBER 31, 2005
ANNUALIZATION REVENUE AND GAS COST ADJUSMTENTS

	Volume Annualization					Gas Cost and Gas Cost Recovery Revenue Anualization				
Retail Classes	Test Year Volume (Therms) (1)	Jan 2006 Volume (Therms) (2)	Jan 2005 Volume (Therms) (3)	Volume Adjustment (Therms) (4)	Annualized Volume (Therms) (5)	Test Year Revenue (Dollars) (6)	Delivery Margins ($/Therm) (7)	Adjustment to Margins (Dollars) (8)	Adjustment to Gas Costs (Dollars) (9)	Total Revenue Annualization (Dollars) (10)
Res - K	17,360,216	2,755,293	3,260,527	(338,507)	17,021,709	$21,520,569	$ 0.11200	($37,913)	$372,726	$ 334,814
Res - M	7,147,462	1,287,875	1,380,723	(62,208)	7,085,254	8,548,584	$ 0.11200	(6,967)	168,233	161,266
Res - T	277,021	56,417	54,243	1,457	278,478	282,029	$ 0.11200	163	8,767	8,930
	24,784,698	4,099,585	4,695,493	(399,258)	24,385,440	$30,351,181		($44,717)	$549,727	$ 505,010
Com - K	3,334,148	583,007	633,279	(33,682)	3,300,466	$4,018,857	$ 0.09000	($3,031)	$107,443	104,411
Com - M	2,776,131	544,597	554,346	(6,532)	2,769,599	3,013,227	$ 0.09000	(588)	86,179	85,591
Com - T	154,249	33,070	30,988	1,395	155,644	140,947	$ 0.09000	126	5,476	5,602
	6,264,528	1,160,674	1,218,613	(38,819)	6,225,709	$7,173,032		($3,494)	$199,098	$195,604
HLF - M	1,988,399	163,909	254,150	(60,461)	1,927,938	$2,066,544	$ 0.08000	($4,837)	($18,552)	(23,389)
Ind - K	249,899	3,308	3,233	50	249,949	$189,155	$ 0.06000	$3	$777	780
Grain - K	47,361	3,865	7,851	(2,671)	44,690	$57,420	$ 0.09000	($240)	($832)	(1,073)
Irr - K	5,121,750	24,991	29,237	(2,845)	5,118,905	$4,073,312	$ 0.08000	($228)	$4,168	3,940
Total Ret Sales	38,456,635	5,456,332	6,208,577	(504,004)	37,952,631	$43,910,643		($53,513)	$734,385	$680,873
C&I Trans - M	2,991,437	452,989	401,885	34,240	3,025,677	$269,186	$ 0.07500	$2,568	$0	2,568
HLF Trans - M	152,737	5,156	11,857	(4,490)	148,247	15,404	$ 0.08000	(359)	0	(359)
	3,144,174	458,145	413,742	29,750	3,173,924	$284,590		$2,209	$0	$2,209
Com Trans - K	8,082,623	1,521,554	1,409,159	75,305	8,157,928	$1,176,679	$ 0.08700	$6,552	$0	$ 6,552
Livestk Tran - K	4,074,474	416,672	336,799	53,515	4,127,989	189,487	$ 0.03400	1,820	0	1,820
Grain Tran - K	519,903	24,582	100,418	(50,810)	469,093	63,981	$ 0.08700	(4,420)	0	(4,420)
Ind Tran - K	406,801	32,783	34,679	(1,270)	405,531	37,093	$ 0.06000	(76)	0	(76)
Irr Tran - K	24,659,225	108,749	134,928	(17,540)	24,641,685	2,685,205	$ 0.07000	(1,228)	0	(1,228)
Irr FC Tran - K	1,542,541	9	24,203	(16,210)	1,526,331	22,653	$ 0.01460	(237)	0	(237)
	39,285,567	2,104,349	2,040,186	42,989	39,328,556	$4,175,098		$2,410	$0	$2,410
Specials FC - K	6,614,089	26,000	0	17,420	6,631,509	157,908	$ 0.01500	261	0	261
Specials Oth - K	12,310,631	1,234,250	958,901	184,484	12,495,115	133,996	$ 0.00755	1,393	0	1,393
	18,924,720	1,260,250	958,901	201,904	19,126,624	$291,904		$1,654	$0	$1,654
Total Trans	61,354,461	3,822,744	3,412,829	274,643	61,629,104	$4,751,592		$6,273	$0	$6,273
Total System	99,811,096	9,279,076	9,621,406	(229,361)	99,581,735	$48,662,236		($47,240)	$734,385	$687,145

	Jan 2006	Gas Costs Jan 2005	Blended
M System	$ 1.0928	$ 0.8430	$ 1.010366
K System	$ 1.2053	$ 0.8653	$ 1.0931
K (No Capacity)	$ 0.9789	$ 0.6402	$ 0.8671
K Grain	$ 1.0921	$ 0.7528	$ 0.9801
T System	$ 0.8994	$ 0.6914	$ 0.8307

Note: Finney County and Finney County special contract volumes and related have been adjusted to reflect a full year on the special contract.

Exhibit__(Volker-2)

MIDWEST ENERGY, INC.
TEST YEAR ENDED DECEMBER 31, 2005
WEATHER NORMALIZATION STATISTICAL ESTIMATION SUMMARY

Customer Class	HDD Sensitivity Therms/HDD (1)	HDD Sensitivity T-Stat (2)	CDD Sensitivity Therms/CDD (3)	CDD Sensitivity T-Stat (4)	Precip Sensitivity Therms/Inch (5)	Precip Sensitivity T-Stat (6)	R-Square (7)
M System							
Res	1212	27.99					0.919
Gen Service	731	9.46					0.971
C&I (Trans)	246	16.96					0.856
K System							
Res	2,807	44.43					0.965
Com	622	32.11					0.940
Ind	26	5.64	88	7.76			0.842
Irr					(69,918)	-2.37	0.877
Com (Trans)	788	3.95					0.980
Ind (Trans)	16	2.03	96	4.75			0.761
Irr (Trans)					(525,558)	-2.98	0.904
Finney (Trans)					(2,067)	-1.38	0.912
Special FC (Trans)					(47,534)	-1.38	0.912
T System							
Res	50	20.28					0.834
Com	26	21.49					0.890
Other Specials	74	17.91					0.873
TOTAL	6,598		185		(645,077)		

Notes:

1. CDD Sensitivity defined - for an average daily temperature change of -1 degree farrenheit, energy usage changes by the listed amount.

2. HDD Sensitivity defined - for an average daily temperature change of +1 degree farrenheit, energy usage changes by the listed amount.

3. Precip Sensitivity defined - for an monthly increase of precipitation of 1inch, energy usage changes by the listed amount.

4. The Finney County and Finney County Special Contracts have been adjusted to reflect a full year of usage assuming that 11 of the Finney County class meters remained on the tariff while the remainder are on the special contract that was first put into place around June, 2005.

Exhibit__(Volker-3)

MIDWEST ENERGY, INC.
TEST YEAR ENDED DECEMBER 31, 2005
WEATHER NORMALIZATION VOLUME ADJUSTMENT

Customer Class	HDD Sensitivity (Th/HDD) (1)	Abnormal HDD's (2)	HDD Adjustment (Therms) (3)	CDD Sensitivity (Th/CDD) (4)	Abnormal CDD's (5)	CDD Adjustment (Therms) (6)	Precipitation Sensitivity (Th/Inch) (7)	Abnormal Precip. (8)	Precipitation Adjustment (Therms) (9)	Total Weather Normalization Volume Adj. (Therms) (10)
M System Retail										
M Res	1,212	368.0	445,905	-	(182.6)	-	-	-	-	445,905
M Gen Service	731	368.0	269,088	-	(182.6)	-	-	-	-	269,088
M HLF	-	368.0	-	-	(182.6)	-	-	-	-	-
Total M Retail	1,943		714,993	-		-	-		-	714,993
K System Retail										
K Res	2,807	368.0	1,032,924	-	(182.6)	-	-	-	-	1,032,924
K Com	622	368.0	228,933	-	(182.6)	-	-	-	-	228,933
K Grain	-	368.0	-	-	(182.6)	-	-	-	-	-
K Irr	-	368.0	-	-	(182.6)	-	(69,918)	1.3	(88,330)	(88,330)
K Ind	26	368.0	9,633	88	(182.6)	(16,149)	-	-	-	(6,516)
Total K Retail	3,455		1,271,490	88		(16,149)	(69,918)		(88,330)	1,167,010
T System Retail										
T Res	50	368.0	18,236	-	(182.6)	-	-	-	-	18,236
T Com	26	368.0	9,637	-	(182.6)	-	-	-	-	9,637
Total T Retail	76		27,873	-		-	-		-	27,873
M System Transport										
M Com & Ind	246	368.0	90,356	-	(182.6)	-	-	-	-	90,356
M HLF	-	368.0	-	-	(182.6)	-	-	-	-	-
Total M Transport	246		90,356	-		-	-		-	90,356
K System Transport										
K Com	788	368.0	289,990	-	(182.6)	-	-	-	-	289,990
K Grain	-	368.0	-	-	(182.6)	-	-	-	-	-
K Ind	16	368.0	6,017	96	(182.6)	(17,575)	-	-	-	(11,558)
K Livestock	-	368.0	-	-	(182.6)	-	-	-	-	-
K Irr	-	368.0	-	-	(182.6)	-	(525,558)	1.3	(663,955)	(663,955)
K Finney	-	368.0	-	-	(182.6)	-	(2,067)	0.9	(1,798)	(1,798)
K FC Specials	-	368.0		-	(182.6)	-	(47,534)	0.9	(41,355)	(41,355)
Other Specials	74	368.0	27,333	-	(182.6)	-	-	-	-	27,333
Total K Transport	879		323,340	96		(17,575)	(575,159)		(707,108)	(401,343)
Total Midwest System	6,598		2,428,052	185		(33,725)	(645,077)		(795,438)	1,598,890

	Normal	Actual	Difference
Heating Degree Days	5,439	5,071	368
Cooling Degree Days	1,403	1,586	(183)
Precipitation 3 counties	22.3	21.1	1.3
Precipitation Finney	19.9	19.0	0.9

MIDWEST ENERGY, INC.
TEST YEAR ENDED DECEMBER 31, 2001
WEATHER NORMALIZATION REVENUE AND GAS COST ADJUSTMENT

	Total Weather Normalization Volume Adj. (Therms) (1)	Delivery Rate Margins (2)	Revenue Adjustment to Margins ($) (3)	Total Weather Normalization Volume Adj. (Therms) (4)	Average Gas Costs ($/Th) (5)	Pass Thru Gas Cost Revenue ($) (6)	**Total Weather Revenue Adjustment ($) (7)**	**Total Weather Gas Cost Adjustment ($) (8)**
M System Retail								
M Res	445,905	$ 0.11200	$ 49,941	445,905	$ 0.8274	$ 368,952	$ 418,893	$ 368,952
M Gen Service	269,088	$ 0.09000	24,218	269,088	$ 0.8274	222,649	246,867	222,649
M HLF	-	$ 0.08000	-	-	$ 0.8274	-	-	-
Total M Retail	714,993		$ 74,159	714,993		$ 591,600	$ 665,760	$ 591,600
K System Retail								
K Res	1,032,924	$ 0.11200	$ 115,687	1,032,924	$ 0.8936	$ 923,031	$ 1,038,718	$ 923,031
K Com	228,933	$ 0.09000	20,604	228,933	$ 0.8936	204,577	225,181	204,577
K Grain	-	$ 0.09000	-	-	$ 0.7092	-	-	-
K Irr	(88,330)	$ 0.08000	(7,066)	(88,330)	$ 0.7092	(62,647)	(69,713)	(62,647)
K Ind	(6,516)	$ 0.06000	(391)	(6,516)	$ 0.7092	(4,622)	(5,013)	(4,622)
Total K Retail	1,167,010		$ 128,834	1,167,010		$1,060,339	$ 1,189,173	$ 1,060,339
T System Retail								
T Res	18,236	$ 0.11200	$ 2,042	18,236	$ 0.7330	$ 13,367	$ 15,410	$ 13,367
T Com	9,637	$ 0.09000	867	9,637	$ 0.7330	7,064	7,931	7,064
Total T Retail	27,873		$ 2,910	27,873		$ 20,431	$ 23,341	$ 20,431
M System Transport								
M C&I	90,356	$ 0.07500	$ 6,777	90,356	$ -	$ -	$ 6,777	$ -
M HLF	-	$ 0.06000	-	-	$ -	-	-	-
Total M Transport	90,356		$ 6,777	90,356	$ -	$ -	$ 6,777	$ -
K System Transport								
K Com	289,990	$ 0.08700	$ 25,229	289,990	$ -	$ -	$ 25,229	$ -
K Grain	-	$ 0.08700	-	-	$ -	-	-	-
K Ind	(11,558)	$ 0.06000	(694)	(11,558)	$ -	-	(694)	-
K Livestock	-	$ 0.03400	-	-	$ -	-	-	-
K Irr	(663,955)	$ 0.07000	(46,477)	(663,955)	$ -	-	(46,477)	-
K Finney	(1,798)	$ 0.01460	(26)	(1,798)	$ -	-	(26)	-
K FC Specials	(41,355)	$ 0.01500	(620)	(41,355)	$ -	-	(620)	-
Other Specials	27,333	$ 0.06205	1,696	27,333	$ -	-	1,696	-
Total K Transport	(401,343)		$ (20,892)	(401,343)		$ -	$ (20,892)	$ -
Total Midwest System	1,598,890		$ 191,788	1,598,890		$1,672,371	$ 1,864,159	$ 1,672,371

	Gas Costs Test Year	Retail Volumes	Average Cost
M System	$ 9,856,235	11,911,992	$ 0.8274
K System (Commodity)	$ 18,520,480	26,113,374	$ 0.7092
K (Capacity)	$ 3,819,909	20,718,044	$ 0.1844
K (Half Capacity)		23,681	$ -
T System	$ 316,121	431,270	$ 0.7330
Total	$ 32,512,745	38,456,635	$ 0.8454

Midwest Energy, Inc.
Customer Growth Adjustment
Test Year Ended 12/31/05

	Class	Cust= Meters/12 (1)	Prior Year Average Customers (2)	Change In Year-End Customers (3)	Adjusted Customer Meters (4)	Normalized Volumes (5)	Normal Use per Cust (6)	Customer Growth Chg in Volumes (7)
1	Res K	21,847	21,966	(59)	21,788	18,054,633	826	(48,861)
2	Res M	10,476	10,461	8	10,484	7,531,159	719	5,481
3	Res T	403	405	(1)	402	296,714	737	(890)
4	Com K	2,791	2,754	19	2,810	3,529,399	1,265	23,711
5	Com M	1,452	1,462	(5)	1,447	3,038,687	2,093	(10,814)
6	Com T	82	79	2	84	165,281	2,014	3,356
7	HLF M	194	245	(26)	168	1,927,938	9,964	(258,636)
8	Ind K	5	4	0	5	243,433	53,113	24,343
9	Grain K	63	69	(3)	60	44,690	709	(2,276)
10	Irr K	545	511	17	561	5,030,575	9,237	153,573
11								
12	Sales Total	37,857	37,956	(50)	37,807	39,862,509	1,053	(111,013)
13								
14	Com Tran M	75	64	5	80	3,116,033	41,826	212,615
15	HLF Tran M	8	5	1	10	148,247	18,340	26,746
16								
17	Com Tran K	1,359	1,395	(18)	1,340	8,447,918	6,218	(113,993)
18	Lvstck Tran K	20	19	0	20	4,127,989	209,898	69,966
19	Grain Tran K	57	58	(0)	57	469,093	8,206	(1,710)
20	Ind Tran K	5	9	(2)	3	393,972	80,130	(163,599)
21	Irr Tran K	1,983	2,160	(88)	1,895	23,977,730	12,092	(1,068,644)
22	Irr FC Tran K	11	11	0	11	1,524,533	30,535	1,113
23								
24	Special FC K	255	249	3	258	6,590,154	30,535	84,130
25	Special Other	16	16	0	16	12,522,448	786,751	-
26								
27	Transport Tot	3,788	3,986	(99)	3,688	61,318,117	16,189	(953,375)
28								
29	Total	41,645	41,942	(149)	41,496	101,180,626	2,430	(1,064,388)
30								
31	INTER			0				
32								
33	Systems Total	41,645	41,942	(149)	41,496	101,180,626	2,430	(1,064,388)

Midwest Energy, Inc.
Customer Growth Adjustment
Test Year Ended 12/31/05

	Class	Change In Year-End Customers (1)	Customer Growth Chg in Volumes (2)	Customer Charges (3)	Delivery Volumetric Rates (4)	Change in Delivery Revenue (5)	Change in Gas Cost Recovery (6)	Total Customer Growth Rev Adjustment (7)
1	Res K	(59)	(48,861)	$10.00	0.1120	($12,567)	($43,981)	($56,549)
2	Res M	8	5,481	$10.00	0.1120	$1,529	$4,553	$6,082
3	Res T	(1)	(890)	$10.00	0.1120	($245)	($653)	($897)
4	Com K	19	23,711	$15.00	0.0900	$5,509	$21,260	$26,769
5	Com M	(5)	(10,814)	$15.00	0.0900	($1,903)	($8,934)	($10,837)
6	Com T	2	3,356	$15.00	0.0900	$602	$2,457	$3,059
7	HLF M	(26)	(258,636)	$30.00	0.0800	($30,036)	($182,993)	($213,029)
8	Ind K	0	24,343	$115.00	0.0600	$2,093	$17,150	$19,243
9	Grain K	(3)	(2,276)	$15.00	0.0900	($782)	($2,000)	($2,783)
10	Irr K	17	153,573	$30.00	0.0800	$18,271	$105,141	$123,411
11								
12	Sales Total	(50)	(111,013)			($17,530)	($88,000)	($105,530)
13								
14	Com Tran M	5	212,615	$50.00	0.0750	$18,996	$0	$18,996
15	HLF Tran M	1	26,746	$60.00	0.0600	$2,655	$0	$2,655
16								
17	Com Tran K	(18)	(113,993)	$30.00	0.0870	($16,517)	$0	($16,517)
18	Lvstck Tran K	0	69,966	$215.00	0.0340	$3,239	$0	$3,239
19	Grain Tran K	(0)	(1,710)	$30.00	0.0870	($224)	$0	($224)
20	Ind Tran K	(2)	(163,599)	$215.00	0.0600	($15,083)	$0	($15,083)
21	Irr Tran K	(88)	(1,068,644)	$40.00	0.0700	($117,225)	$0	($117,225)
22	Irr FC Tran K	0	1,113	$20.00	0.0146	$25	$0	$25
23								
24	Special FC K	3	84,130	$20.51	0.015	$1,961	$0	$1,961
25	Special Other	0	0	$215.00	-	$0	$0	$0
26								
27	Transport Tot	(99)	(953,375)			-$122,174	$0	($122,174)
28								
29	Total	(149)	(1,064,388)			-$139,704	-$88,000	($227,705)
30								
31	INTER	0	0			$0	$0	$0
32								
33	Sys Total	(149)	(1,064,388)			($139,704)	($88,000)	($227,705)

MIDWEST ENERGY, INC
SAMPLE CALCULATION OF THE NORMALIZED VOLUME RIDER
TEST YEAR ENDED DECEMBER 31, 2005

	Rate Classes	Test Year Adj. Volumes (Therms) (1)	Volumetric Delivery Rate $/Therm (2)	Test Year Volumetric Delivery Rev. (3) = (1) x (2)	Test Year Adjusted Meters (4)	Test Year Delivery Rev. Per Meter (5) = (3)/(4)	Sample Year Act. Volumes (Therms) (6)	Sample Year Volumetric Delivery Rev. (7) = (6) x (2)	Sample Year Actual Meters (8)	Sample Year Delivery Rev. Per Meter (9) = (7)/(8)
1	Residential									
2	Res - K Sales	18,005,772	$0.154000	$2,772,889	21,788		17,360,216	$2,673,473	21,847	
3	Res - M Sales	7,536,641	$0.154000	1,160,643	10,484		7,147,462	1,100,709	10,476	
4	Res - T Sales	295,824	$0.154000	45,557	402		277,021	42,661	403	
5	Res Total	25,838,237	$0.154000	$3,979,088	32,674	$121.78	24,784,698	$3,816,844	32,726	$116.63
6								**Difference from Test Year**		**$5.15**
7	Commercial									
8	Com - K Sales	3,553,110	$0.133000	$472,564	2,810		3,334,148	$443,442	2,791	
9	Com - M Sales	3,027,872	$0.133000	402,707	1,447		2,780,037	369,745	1,453	
10	Com - T Sales	168,637	$0.133000	22,429	84		154,249	20,515	82	
11	C&I - M Trans	3,328,648	$0.075000	249,649	80		2,991,437	224,358	75	
12	Com - K Trans	8,333,925	$0.090000	750,053	1,340		8,082,623	727,436	1,359	
13	Com Total	18,412,192	$0.103051	$1,897,401	5,760	$329.41	17,342,494	$1,785,496	5,759	$310.04
14								**Difference from Test Year**		**$19.37**
15	Oil Field									
16	HLF - M Sales	1,669,302	$0.093000	$155,245	168		1,984,493	$184,558	193	
17	HLF - M Trans	174,993	$0.093000	16,274	10		152,737	14,205	8	
18	HLF Total	1,844,295	$0.093000	$171,519	177	$969	2,137,230	$198,762	201	$991
19								**Difference from Test Year**		**($22.34)**
20	Industrial									
21	Ind - K Sales	267,776	$0.085000	$22,761	5		249,899	$21,241	5	
22	Ind -K Tran	230,374	$0.085000	19,582	3		406,801	34,578	5	
23	Ind Total	498,150	$0.085000	$42,343	8	$5,349	656,700	$55,820	10	$5,876
24								**Difference from Test Year**		**($527.18)**
25	Grain Dryers									
26	Grain - K Sales	42,414	$0.090000	$3,817	60		47,361	$4,262	63	
27	Grain - K Tran	467,383	$0.090000	$42,065	57		519,903	$46,791	57	
28	Grain Total	509,798	$0.090000	$45,882	117	$393	567,264	$51,054	120	$425
29								**Difference from Test Year**		**($31.87)**
30	Irrigation									
31	Irr - K Sales	5,184,148	$0.088000	$456,205	561		5,121,750	$450,714	545	
32	Irr - K Tran	22,909,086	$0.088000	$2,016,000	1,895		24,659,225	$2,170,012	1,983	
33	Irr Total	28,093,234	$0.088000	$2,472,205	2,456	$1,007	29,780,975	$2,620,726	2,528	$1,037
34								**Difference from Test Year**		**($30.18)**
35	Livestock									
36	Livestk Tran - K	4,197,955	$0.035500	$149,027	20	$7,451	4,074,474	$144,644	20	$7,355
37								**Difference from Test Year**		**$96.60**
38	Finney County									
39	Irr FC Tran - K	322,965	$0.018300	$5,910	11	$532	1,542,541	$28,229	112	$252
40								**Difference from Test Year**		**$280.34**
41										
42	Total									
43	Total System	79,716,824	$0.109931	$8,763,376	41,222	$213	80,886,376	$8,891,946	41,475	$214
44								**Difference from Test Year**		**($1.80)**

	Rate Class	Normal Use per Customer (Therms)	Adjustment per Customer ($)	**NVR Adj. To Rates ($/Therm)**
45–47				
48	Residential	791	$5.15	**$0.006517**
49	Commercial	3,197	$19.37	**$0.006061**
50	Oil Field	10,415	($22.34)	**($0.002145)**
51	Industrial	62,924	($527.18)	**($0.008378)**
52	Grain Dryers	4,367	($31.87)	**($0.007298)**
53	Irrigation	11,440	($30.18)	**($0.002639)**
54	Livestock	209,898	$96.60	**$0.000460**
55	Finney County	29,071	$280.34	**$0.009643**