Exhibit No.: _____
Issue: Cost of Service,
Weather Equalization Revenue Rider
Witness: Kent D. Taylor
Exhibit Type: Direct
Sponsoring Party: Missouri Gas Utility, Inc.
Case No.: GR-2008-____
Date: _____

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. GR-2008-____

DIRECT TESTIMONY

OF

KENT D. TAYLOR

ON BEHALF OF

MISSOURI GAS UTILITY, INC.

TABLE OF CONTENTS

DIRECT TESTIMONY
OF
KENT D. TAYLOR

MISSOURI GAS UTILITY, INC.

CASE NO. GR-2008-____

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. Kent D. Taylor, 777 29th Street, Suite 200, Boulder, Colorado, 80303.

Q. ON WHOSE BEHALF IS YOUR TESTIMONY PRESENTED?

A. Missouri Gas Utility, Inc ("MGU" or the "Company").

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am the Chairman of KTM, an energy consulting and management firm.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND RELEVANT BUSINESS EXPERIENCE.

A. Information responsive to this question is shown in the attached **Appendix 1**.

Q. HAVE YOU TESTIFIED BEFORE OTHER REGULATORY BODIES?

A. Yes. I have testified before the Federal Energy Regulatory Commission, the Colorado Public Utilities Commission, the Public Service Commission of Nevada, Regie Du Gaz Natural Du Quebec, and the Florida Public Service Commission.

Q. IN WHAT CAPACITY?

A. I have testified as a cost of service, cost allocation and rate design witness and also as a client management representative.

Q. WHAT IS YOUR RELATIONSHIP WITH MISSOURI GAS UTILITY?

A. MGU has retained KTM to assist MGU in the development of a cost-of-service study, the goal of which is to determine the sufficiency of MGU's current base rates and propose new rates.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. I will explain (1) the analysis and conclusions that lead MGU to request a change in its base rates, and (2) the workings of the proposed tariff modification related to the Weather Equalization Revenue Adjustment Rider.

Q. ARE YOU SPONSORING ANY SCHEDULES?

A. Yes, I am sponsoring a Cost of Service Study entitled Schedule KDT-1 and supporting Schedules KDT-2 through KDT-4. In addition, I am sponsoring Schedules KDT-5 and KDT-6, which are related to the Weather Equalization Revenue Rider proposal.

COST-OF-SERVICE STUDY

Q. WERE SCHEDULE KDT-1 AND THE SUPPORTING SCHEDULES PREPARED BY YOU OR UNDER YOUR DIRECTION?

A. Yes. However, the accounting data offered in KDT-3 are offered as source document references and were prepared by the Company and its auditors.

Q. PLEASE EXPLAIN YOUR OVERALL CONCLUSIONS.

A. MGU's base rates, defined as its monthly Customer Charges and volumetric Commodity Charges, are inadequate to recover MGU's cost-of-service. An annual revenue deficiency of $443,131 is evident from my analysis. A combination of customer and commodity charge increases is proposed in order to fully recover

MGU's current revenue requirements.

Q. PLEASE DESCRIBE YOUR ANALYTICAL METHODS.

A. The primary analytical methods are listed below. An index of schedules along with an analytical schematic showing the relationship of various sheets and schedules to the Cost-of-Service Study is offered to facilitate third party analysis. I used MGU's most recent fiscal year, the twelve months ended March 31, 2007, as the test period. I then modified that test year with material known and measurable changes in order to derive the annual revenue requirement. Rate determinants were calculated by using the customer count for the month of March 2007 and applying that customer count to a weather-normalized average customer usage in order to calculate annual sales volumes.

1. In this general rate filing, MGU has chosen to include cost-of-service adjustments, primarily known and measurable changes, in its revenue requirement. Consequently, gross plant, operations & maintenance expense, test year depreciation, and capital structure have been adjusted.

2. The **test period** is the twelve months ended March 31, 2007, adjusted for known and measurable changes as shown on Schedule KDT-4. The test period is also MGU's accounting fiscal year.

3. **Operating expenses** are equal to the actual operating expenses incurred during the test period, with the addition of known and measurable changes. These expenses include Operation & Maintenance, Administrative &

General, Taxes other than income taxes, and Depreciation.

4. **Rate Base** includes four components, Net Utility Plant, Unamortized Start-up Costs, Working Capital, and Deferred Income Taxes. (Sheets 7, 8, 9, 10 and Schedule KDT-3).

5. **Return on rate base** – MGU's parent company capitalization at June 30, 2007, was used as the basis upon which to develop the cost of capital. (Sheet 11) The cost of common equity is 12.00%.

6. **Corporate overhead allocations** – MGU's parent company, CNG Holdings, Inc., allocates corporate overhead costs to its subsidiary companies in accordance with the Distrigas Method.

7. **Income taxes** – Income taxes are calculated by applying the Missouri state income tax rate of 6.25% to the pretax return on common equity and the federal income tax rate of 34.00% to the taxable income after being reduced by the state income taxes.

8. **Rate determinants** – MGU's customer count by customer class at March 31, 2007, adjusted for the addition of a new large volume customer, was used as the basis upon which Customer Charge revenue was calculated. The average annual customer usage for the test period was calculated and weather normalized using the thirty year normal average annual heating degree day deficiency as measured at Kansas City International Airport.

9. **Rate design** – The total revenue requirement was calculated, reduced by

projected Customer Charge revenue and contract transportation revenue, and then divided by the appropriate volume determinants as described above.

10. **Transportation revenue** – MGU provides transportation service to one transportation customer that represents approximately one-third of MGU's total throughput. The current transportation rate for that customer is $2.70 per dekatherm. Actual annual volume for the fiscal year ended March 31, 2007 was multiplied by the anticipated new transportation rate of $3.50 per dekatherm. As discussed by MGU witness Johnston in his testimony, MGU believes the fuel switching ability of the shipper, combined with its large volume purchasing discounts, constrains MGU's ability to extract a larger transportation charge.

11. **Cost allocations between customer classes** – No distinction between customer classes (residential, commercial, large volume) was made in the development of cost responsibility other then the distinction implicit in the Customer Charges for different customer classes.

Q. PLEASE EXPLAIN SCHEDULE KDT-1.

A. Schedule KDT-1 is a Cost-of-Service Study that solves for the commodity rate necessary to recover the cost-of-service that is not recovered from transportation revenues and customer charges. Sheet 1 is a cost-of-service summary showing the full cost-of-service, rate base, and weather-adjusted rate determinants. Sheet

2 is a revenue deficiency analysis adjusted for the additional revenues necessary to recover MGU's full cost-of-service as shown in Sheet 1. Sheet 2 is divided into three sections. Column (c) shows the actual test period revenues and costs. The operating income is compared to a simple average rate base for the test year in order to show the return on rate base. Column (e) adjusts the revenues by multiplying the projected weather-normalized volumetric usage by existing rates and adjusts costs for known and measurable changes. Year end rate base is adjusted for known and measurable changes. Column (f) shows the adjustments necessary to provide the full revenue recovery as shown in Column (g). Other pages in the study support the conclusions in Sheets 1 and 2.

Q. PLEASE EXPLAIN THE MATERIAL ADJUSTMENTS INCLUDED IN YOUR COST-OF-SERVICE ANALYSIS.

A. My analysis included only known and measurable changes and they are listed here.

1. **Test year depreciation expense** - was adjusted to include annual depreciation expense on gross plant balances at March 31, 2007, adjusted for the budgeted plant additions for fiscal year 2008.
2. **Regulatory filing expense amortization** – The budgeted amounts for this rate case are added to Account 186, amortized over three years, and included as an adjustment to O&M.
3. **Salary adjustments** – Known and measurable changes to salaries, as they

impact O&M, from the FY 2008 budget are included.

4. **Customer count** – Customer count at March 31, 2007, is used as the basis upon which to calculate test year sales volumes and calculate Customer Charge revenue. This practice best reflects current conditions.

5. **Sales volumes –** Sales volumes were calculated by multiplying March 2007 customer count by average, per customer weather-adjusted usage. In addition, the annual anticipated sales volume for the new large volume customer mentioned above is included.

6. **Year-end Net Plant** – Rate base is dominated by net utility plant. The balance at March 31, 2007 was adjusted to add the investments necessary to serve a new large volume customer (Landmark) and to include the transfer of a portion of the proposed Account 106 balance into Utility Plant in Service.

7. **Start-up Costs** – The unamortized balance of the costs previously isolated as Start-up Costs is included in MGU's rate base. The Stipulation and Agreement in Case No. GO-2005-0120 required MGU to separately account for the costs necessary to initiate service in January 2005 and anticipated a potential cost recovery request in MGU's first general rate filing.

8. **Working Capital** – Working capital has been calculated primarily using a thirteen month average for most accounts. The average balance of natural gas storage inventory is the dominant component of working capital.

9. **Cost of long term debt –** CNG Holdings' long term debt at June 30, 2007, is

used as the debt component for MGU's capital structure. The weighted average cost of that debt is 6.787%.

10. **Return on common equity** – As explained by MGU witness Anderson in his testimony, MGU believes 12.00% is the appropriate return on common equity for a utility with its attributes.

11. **Capital structure** – As explained in more detail by MGU witness Anderson, the capital structure of MGU's parent company was substituted for MGU's capital structure in the belief it more fairly represents that which the credit markets would rely upon. In addition, the substantial recapitalization of the holding company during the first quarter of the current fiscal year, characterized by a common equity injection of $18,959,536, allowed me to adjust the common equity portion of the capital structure to reflect that injection.

Q. PLEASE EXPLAIN THE CALCULATIONS USED TO ESTABLISH THE ACCOUNT BALANCE IN ACCOUNT 106, PLANT HELD FOR FUTURE USE.

A. Adjustment # 5 on Sheet 6 in Schedule KDT-4 shows the method by which the total Account 106 balance was calculated. MGU calculated the original cost net plant that would have existed from the system investment had CNG Holdings not purchased the system. From that value I subtracted the cost of the system as paid by CNG Holdings. The difference is considered to be that portion of net original cost to be transferred to Account 106 - $3,676,440. The accounting

journal entries are a debit to Account 106 and a credit to retained earnings for that amount.

Q. PLEASE EXPLAIN THE $899,637 ADDITION TO GROSS PLANT AS SHOWN ON SHEET 7 OF SCHEDULE KDT-1.

A. The Company believes the Account 106 balance should be transferred to Utility Plant in Service as the Company connects customers. See the calculations on Adjustment # 5 on Sheet 6 in Schedule KDT-4. The original system anticipated 1,718 customer connections. There were 774 customer connections when CNG Holdings purchased the system. The 944 customer difference is divided into the Account 106 balance of $3,676,440, yielding $3,895 per connection to be transferred into UPIS as connections occur above the 774 customers MGU inherited. MGU has connected an additional 231 customers and, therefore, proposes to add $899,637 to gross plant. This rationale is explained in greater detail by MGU witness Johnston.

Q. ARE THERE OTHER ADJUSTMENTS YOU MADE IN ORDER TO DEVELOP THE COST OF SERVICE STUDY?

A. Yes, In addition to the modifications listed above, I have adopted MGU's parent company capital structure as the appropriate surrogate for MGU. Since the end of the test period, MGU's parent sold a significant amount of new common stock, materially changing its capital structure. As explained by MGU witness Anderson, it is appropriate to use the parent company capital structure.

Q. IS MGU REQUESTING RECOVERY OF ITS START-UP COSTS IN ACCORDANCE WITH THE PROVISIONS OF THE STIPULATION & AGREEMENT IN CASE NO. GO-2005-0120?

A. Yes. MGU has included the unamortized balance of Account 186 in rate base as part of its working capital calculation. In addition, the annual amortization of the balance is included in O&M in Account 928.

Q. PLEASE EXPLAIN THE RATE DESIGN METHODOLOGY INCLUDED IN YOUR COST-OF-SERVICE STUDY.

A. First, the total system revenue requirement of $1,055,054 was reduced by projected Customer Charge revenue and transportation revenues in order to derive the net revenue requirement to be collected from sales customers through the Commodity Charge. The residual revenue requirement of $674,887 was divided by total system weather adjusted sales volumes in order to arrive at the proposed distribution rate applicable to all sales customer classes.

Q. WHAT IS THE JUSTIFICATION FOR INCREASING THE CUSTOMER CHARGES?

A. As mentioned in Mr. Johnston's testimony, the percentage of MGU's total revenue requirement collected from Customer Charges is steadily declining. Actual Customer Charge revenues during the test year was approximately 20 % of total revenues. Without a transfer of revenue responsibility between the two revenue sources, the share in this filing would be 10 %. The Customer Charge

revenue responsibility percentage requested here is approximately 19 % of the total revenue requirement.

Q. HAS MGU ACCOMPLISHED A RATE STUDY TO ALLOCATE COSTS AMONG THE CUSTOMER CLASSES?

A. No. The system still has less than 1,000 customers and the Company believes that although a fully distributed class cost of service study is philosophically appropriate, such an effort should be postponed until the system is larger and better able to enjoy economies of larger scale operation.

Q. **PLEASE STATE YOUR CONCLUSIONS.**

A. MGU's annual revenue deficiency is $ 443,131. The return on rate base at existing rates is 3.77%. The proposed rates will yield an overall rate of return on rate base of 9.50%. The corresponding return to common equity is 12.00%.

WEATHER EQUALIZATION REVENUE ADJUSTMENT RIDER

Q. PLEASE DESCRIBE THE SCHEDULES YOU ARE SPONSORING THAT RELATE TO THE WEATHER EQUALIZATION REVENUE ADJUSTMENT RIDER.

A. Schedule KDT-5 is offered as a proposed addition to MGU's tariff. It explains the nature and operation of the Weather Equalization Revenue Adjustment Rider (WERR). Schedule KDT-6 is composed of three sheets and provides twelve

month sample calculations using test period data from this filing.

Q. **PLEASE EXPLAIN THE REASON FOR MGU'S PROPOSAL TO ADD THE WERR TO ITS TARIFF.**

A. As explained by Mr. Johnston, MGU has not proposed a Straight-Fixed-Variable rate design, choosing instead a traditional rate design dominated by commodity-based rates. The goal of the WERR, therefore, is to protect MGU from the expected loss of revenue that will result from weather adjusted sales volumes that are substantially in excess of expected sale volumes.

Q. WHY DOES MGU REQUIRE PROTECTION FROM WEATHER NORMALIZATION?

A. The use of volumetric rate determinants from a thirty year normal calculation increases the probability that MGU will underrecover its revenue requirement. The current method of adjusting sales volumes wherein test period heating degree days (HDD) are compared to the thirty year normal HDD will cause a 16.15% increase in the average temperature-sensitive customer usage over that which is anticipated from the test year average sales customer usage.

(5,249 HDD – 4,519 HDD) ÷ 4,519 HDD = 16.15%

Q. IS IT POSSIBLE THAT THE TEST YEAR HDD IS AN ABERRATION?

A. Yes. If the test period HDD is indeed an aberration and the 30 year normal is representative of future weather, revenue adjustments from the operation of the Rider will be nonexistent. However, as a reasonableness check I calculated the

average HDD for the last five years. In that calculation the thirty year normal yields a value that would cause a 10.90% increase in the temperature-sensitive customer usage if a five year average were compared to the thirty year normal.

(5,249 HDD – 4,733 HDD) ÷ 4,733 HDD = 10.90%

So, I conclude that, even though the test year was slightly warmer than the five year average, the current weather environment is still significantly warmer than the 30 year normal would indicate.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS.

A. The volumetric sales rate determinant for temperature-sensitive sales volume, adjusted for the 30 year normal HDD, is 16.15% higher than that which is anticipated by calculating sales volume based on test year experience. That difference is too large to accept without some form of tariff-based mitigation.

Q. DOES THE WERR PROTECT MGU FROM THE EFFECTS OF CUSTOMER CONSERVATION OR PRICE ELASTICITY OF DEMAND?

A. No. The actual Commodity Charge sales revenues experienced each month would be subjected to the weather equalization calculation. So, only the weather determines the monthly revenue adjustments. If, to cite an extreme example, all weather related sales volumes were eliminated during a month because the price of the commodity was simply too high, MGU would experience no revenue rider relief.

Q. PLEASE LIST THE IMPORTANT ATTRIBUTES OF THE PROGRAM YOU

PROPOSE.

A. The important attributes:

1. Revenue adjustments will occur from September through May.

2. Revenue adjustments will occur on a customer class specific basis, thereby acknowledging the differences in nontemperature-sensitive demand between customer classes.

3 Revenue adjustments will be included in each customer billing for the applicable billing period.

4. All sales customer classes will be subject to the Rider.

5. Revenue adjustments may reduce or increase the billing.

Q. PLEASE PROVIDE A FORMULA SHOWING THE MONTHLY EQUALIZATION REVENUE ADJUSTMENT AND CUSTOMER BILLING ADJUSTMENT ?

A. Referring to the narrative in Schedule KDT-5, the proposed Weather Equalization Revenue Rider, the Weather Equalization Revenue Adjustment calculation for a given billing period and customer class would be:

$$WERA = TSR * WEF$$

Where:

WERA = Weather Equalization Revenue Adjustment

TSR = temperature sensitive revenues

WEF = weather equalization factor

TSR = total commodity revenues – nontemperature-sensitive revenues

WEF = 1 – (NHDD ÷AHDD)

Where: NHDD = NOAA 30 year normal heating degree days for the billing period.

AHDD = actual heating degree days for the billing period.

The Customer Billing Adjustment (CBA) for each billing period and customer class would be:

CBA = WERA ÷ total sales volume for the billing period

Q. HOW WOULD THE REVENUE ADJUSTMENT BE RECOVERED FROM THE CUSTOMER CLASSES?

A. Because the calculations would be accomplished for each customer class, the WERA for each customer class would be collected over that billing period's total sales volumes through the Commodity Charge. The CBA, multiplied by individual customer usage, would be added to each billing period's customer bills.

Q. PLEASE EXPLAIN SCHEDULE KDT-6.

A. Schedule KDT-6 shows illustrative monthly calculations for each sales customer class for the adjusted test period. The calculations assume the average monthly customer usage experienced during the test year is the basis upon which the WERA is calculated. The calculation flow tracks the narrative above.

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

A. Yes.

AFFIDAVIT

State of Colorado)
) ss.
City of Littleton)

Kent D. Taylor, being duly sworn, on oath says that he is the person identified in the foregoing prepared testimony and/or schedules; that such testimony and/or schedules were prepared by or under the direction of said person; that the answers and/or information appearing therein are true to the best of his knowledge and belief; and that if asked the questions appearing therein, his answers thereto would, under oath, be the same.

SUBSCRIBED AND SWORN to before me
on this 29th Day of August, 2007.

KENT D. TAYLOR
PROFESSIONAL QUALIFICATIONS

INDUSTRY EXPERIENCE

OCTOBER 1984 to PRESENT

Chairman, KTM, an energy management and consulting business specializing in the economic interests of large natural gas and electricity users.

JANUARY 1984 to OCTOBER 1984

Director of Gas Acquisitions, KN Energy, Inc. Responsible for natural gas supply for company's integrated pipeline system, operating in seven states. Other responsibilities included all liquids marketing, negotiation of transportation and exchange agreements, pursuit of additional markets, and gas sales agreements for affiliate exploration company.

APRIL 1981 to JANUARY 1984

Director of Corporate Development, Celeron Corporation. Responsible for new business development, acquisitions and mergers, strategy development for existing pipelines (Louisiana Intrastate Gas and Mid Louisiana Gas), and gas marketing for Rocky Mountain area exploration efforts.

AUGUST 1980 to APRIL 1981

Senior Sales Representative, Colorado Interstate Gas Company (CIG). Primary responsibility was new market development. Also negotiated industrial gas sales agreements.

APRIL 1978 to JULY 1980

Senior Staff Analyst, Special Projects, CIG. Responsibilities included formulation of negotiating strategies, initiation of new business opportunities and economic analyses for investment decisions.

JANUARY 1975 to AUGUST 1978

Senior Rate Analyst, CIG. All facets of interstate pipeline rate making.

KENT D. TAYLOR
PROFESSIONAL QUALIFICATIONS

EDUCATION

BSBA, University of Florida, Gainesville, Florida
1967
Major: Accounting

MS, The George Washington University, Washington D.C.
1972
Major: Public Administration

MBA, University of Colorado, Colorado Springs
1979
Major: Accounting/Finance

U.S. Naval Flight Training
Designated U.S. Naval Aviator July 1969

Defense Resource Management Education Course, Navy
Postgraduate School, Monterey, California
1988

PROFESSIONAL QUALIFICATIONS

Certified Public Accountant
Captain, U.S. Naval Reserve (ret)

OTHER TESTIMONY

Regie Du Gaz Natural Du Quebec
Florida Public Service Commission
Colorado Public Utilities Commission
Public Utilities Commission of Nevada
Federal Energy Regulatory Commission