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November 18, 2002

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Missouri Public Service Commission

Dale Hardy Roberts
Secretary/Chief Regulatory Law Judge
Public Service Commission
Governor's Office Building
Madison & E. Capitol
Jefferson City, MO 65101

RE: *In the Matter of the Tariff Filing of Laclede Gas Company to Implement a Gas Supply Incentive Plan Called Catch-Up-Keep-Up,* Case no. GT-2003-0117, Tariff No. JG-2003-396

Dear Judge Roberts:

Enclosed for filing in the above-referenced case are the original and 8 copies of the Direct Testimony of Ronald Wyse on behalf of the Missouri Department of Natural Resources Energy Center. Accompanying the testimony is the affidavit providing the witness's oath. We are also providing an exhibit copy for hearing purposes. Thank you for your attention to this matter.

Sincerely,

JEREMIAH W. (JAY) NIXON
Attorney General

Ronald Molteni
Assistant Attorney General

Enclosures
cc: Judge Ruth
All Parties on the Service List

Exhibit No.:	
Issues:	Commitment to Provide No-Cost Weatherization Assistance to Laclede Gas Company Low-Income Residential Customers as a Component of a Proposed Gas Supply Incentive Plan
Witness:	Ronald Wyse
Sponsoring Party:	Missouri Department of Natural Resources' Outreach and Assistance Center, Missouri Energy Center
Type of Exhibit:	Testimony
Case No.:	GT-2003-0117
Date Prepared:	November 18, 2002

LACLEDE GAS COMPANY

DIRECT TESTIMONY

OF

RONALD WYSE

MISSOURI DEPARTMENT OF NATURAL RESOURCES

ENERGY CENTER

November 19, 2002

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI
TESTIMONY OF
RONALD WYSE
MISSOURI DEPARTMENT OF NATURAL RESOURCES
ENERGY CENTER

CASE NO. GT-2003-0117

Q. Please state your name and address.

My name is Ronald Wyse. My business address is Missouri Department of Natural Resources, Energy Center, 1659 East Elm Street, P.O. Box 176, Jefferson City, Missouri 65102-0176.

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

A I am employed by the Missouri Department of Natural Resources as the director of the Missouri Energy Center's Residential and Business program. The Missouri Energy center is a division of state government with its executive office located in Jefferson City, Missouri

R. On whose behalf are you testifying?

A. I am testifying on behalf of the Missouri Department of Natural Resources, an intervenor in these proceedings.

Q. Please describe your educational background and business experience.

A. I attended Central Missouri State University and received a Bachelor of Science in Business Administration degree in 1969.

I have been employed with the Missouri Department of Natural Resources for the past 25 years and have managed energy efficiency grants and loan programs over this time including over 7 years managing the Weatherization Assistance Program. Prior to being employed by the Missouri Department of Natural Resources, I worked in private industry as a plant manager for a Midwest agricultural company.

R. What is the purpose of your testimony?

A. The purpose of my testimony is to focus on the tariff filed by the Laclede Gas Company (Laclede) that establishes an assistance program for its low-income residential customers receiving natural gas service from the company. The "Catch-Up/Keep-Up" program as

proposed by Laclede offers to assist low-income residential customers by providing financial assistance to help pay for low-income energy bills, at approximately $5.4 million annually and to support limited residential weatherization assistance, at approximately $600,000 annually, to qualified households.

Q. Do you support the low-income energy assistance and weatherization as proposed by Laclede?

A. No. Based upon the information provided in Laclede's tariff application that included the Schedule of Rates – Experimental Low-Income Bill Stabilization and Assistance Program, the proposed program provides limited and short-term assistance to low-income residential customers with utility bill arrearages. Laclede's proposal does not provide long-term, sustainable benefits to help low-income customers avoid future utility billing arrearages. Our opposition to this program as proposed by Laclede absolutely does not constitute opposition to low-income assistance programs, in general. A properly designed low-income assistance program should include an effective weatherization component that reduces the utility bill through energy efficiency improvements. Residential weatherization that improves energy efficiency mitigates the long-term problem of energy affordability for low-income customers. Arrearage forgiveness itself does not address the problems that low-income residential customers simply cannot afford energy costs above a certain level, and related rate impacts on all customers.

Q. Can you describe why Laclede's weatherization proposal does not provide long-term benefits?

A. Yes. According to Laclede's proposal, residential customers residing in households with incomes less than or equal to one hundred and seventy five percent (175%) of the federal

poverty level are eligible to receive a limited amount of funds to reduce natural gas service arrearages. The amount proposed by Laclede may not exceed Three Hundred and Seventy Five Dollars ($375) for any single household for any quarterly period if they meet additional qualification requirements. To qualify for quarterly payments, income-eligible customers must agree to review and implement, where feasible, a submitted list of standard, cost-free energy conservation measures designed to reduce the customer's consumption of energy. (Laclede Gas Company, P.S.C. No. 5 Consolidated, Original Sheet No. 28-i, Subsection H. 3., September 23, 2002). Laclede provides no description of "cost-free energy conservation measures". Energy conservation measures (ECM) include caulking, weather-stripping, insulation, heating system tune-ups or replacements and programmable thermostats, to name just a few. These kinds of long-term improvements have costs related to purchase and installation. The term "no-cost" may refer to energy conservation *practices*, rather than *measures*. Practices may include thermostat setback when a household is not occupied or during night-time periods, reducing the frequency of entries or exits from a household, reducing time spent in showers and covering pots and pans when cooking to conserve energy.

Therefore, this list of standard, cost-free energy conservation measures may consist of a simple checklist or brochure reflecting energy practices that, while valuable, alone will have no long-term sustainable impact on the low-income residential customers if there are structural measures that need to be implemented. Our conclusion, after review of the limited amount of information available in Laclede's tariff filing, is that Laclede's proposal does not constitute an effective weatherization assistance program.

Q. Is there an alternative to Laclede's proposed low-income assistance program?

A. Yes. The Energy Center encourages Laclede to fund and implement a well-designed and effectively promoted low-income weatherization assistance program consistent with the federal Low-Income Weatherization Assistance Program administered by the Missouri Department of Natural Resources. A well designed and managed weatherization assistance program will help reduce the energy demand by natural gas customers and may be expected to reduce utility bill amounts for such customers. The long-term benefits of residential weatherization assistance may also help low-income customers avoid future billing arrearages.

Q. Does Laclede have experience with well-designed weatherization assistance programs?

A. Yes. In Laclede's natural gas rate case (No. GR-2001-629) a weatherization assistance program consistent with the federal program guidelines was established and funded at $300,000 annually. However, additional funding is needed to address the increasing number of low-income households served by Laclede.

Q. At the current rate, how long would it take the state's weatherization program at the local level to meet the needs of eligible clients in the Laclede service territory?

B. Within the ten (10) Missouri counties and the City of St. Louis where Laclede provides natural gas service, there are 207,458 total households (150 percent of poverty as of 2000 census data, all fuel types including natural gas, electric, propane and home-heating oil space heated homes) eligible for weatherization assistance. This figure represents over twenty-five percent (25%) of the total county households and is nearly nine and a half percent (9.5%) of all eligible households in the state. At current federal funding resource levels, and the $300,000 allocated by Case No. GR-2001-629, it would take approximately 254 years to serve low-income residential clients in this area.

Q. Do a large number of low-income homes in Missouri still need to be weatherized?

A. Yes. A significant number of low-income households in Missouri are in need of energy-efficiency improvements. According to the state Weatherization Assistance Program (WAP) administered by the Energy Center, from 1978 (beginning of the program in Missouri) through June 30, 2002, a total of 140,827 homes were weatherized in Missouri. The Energy Center estimates an additional 637,891 are eligible. (In FY 2001, the eligibility was increased from 125 to 150% of the poverty level in response to the previous year's heating crisis, resulting in approximately 100,000 additional homes meeting the eligibility criteria.) At the current rate of approximately 2,000 units weatherized statewide each year under federal funding levels prior to FY 2003, it would take more than 300 years to complete all of the eligible homes. At the higher federal funding level for the fiscal year 2003, approximately 3,000 homes should be weatherized annually. If this increased level of funding were continued, it would still take 213 years to complete all of the eligible homes in Missouri. Clearly, on-going and additional sources of low-income energy-efficiency services are needed.

17. What is the estimated number of Missourians currently on weatherization waiting lists?

A. Statewide, more than 3,200 families are currently on weatherization waiting lists.

18. How many new clients are added to that list annually?

1. On average, more than 2,300 households are added to that waiting list annually.

17. What is the relationship between home heating bills in Missouri and low-income residential utility customers?

A. Winter home heating bills in Missouri impose significant burdens on low-income households. These home heating burdens can be compared to the "shelter" burdens which

the U.S. Department of Housing and Urban Development (HUD) has defined to be "affordable."

According to the HUD, a household that faces a shelter burden exceeding 30 percent of income is over-extended. Shelter burdens include rent or mortgage payments and all utility payments other than telephone. A household that is paying 20 or 25 percent of its income simply toward home heating—and, not taking into account electricity use—will not be able to reduce its heating burden below the 30 percent of income threshold. (Source: Structuring A Public Purpose "Distribution Fee" for Missouri, Fisher, Sheehan & Colton, July 1997, pg. 6)

Q. What is the significance of home heating burdens?

A. The significance of the home heating burdens imposed on low-income households is even more apparent when one considers the full range of incomes at which low-income residents of Missouri live. Most households that qualify for the Low-Income Home Energy Assistance Program (LIHEAP) in Missouri are <u>below</u> the poverty level rather than <u>at</u> the poverty level ceiling. A household with an annual income of $0 to $2,000 will have winter heating burdens of nearly 85 percent; households living with annual incomes of $2,000 to $4,000 will have winter heating burdens of nearly 30 percent; and households living with annual incomes of $4,000 to $6,000 will have winter heating burdens of more than 16 percent. The number of households with these extremely low levels of annual incomes (and thus high heating burdens) is significant. Of the roughly 125,000 Missouri LIHEAP participants, more than 71,000, or 60 percent, live with incomes of less than $6,000. (Source: "Structuring a Public Purpose 'Distribution Fee' for Missouri", Fisher, Sheehan & Colton, Public Finance and General Economics consultants, July 1997)

18. Please describe recent heating expense increases and the impact on low-income residential customers.

A. During the summer of 2000, natural gas prices began rising across the nation. As we entered the 2000-2001 winter heating period, natural gas prices had increased from approximately $2.00 per Mcf (1,000 cubic feet) to over $10 per Mcf. On July 31, 2001, Public Service Commission Chair Kelvin Simmons relayed his concerns regarding the plight of residential customers in a letter sent to members of the Missouri Congressional delegation. In that letter, Chairman Simmons noted "Even though energy prices aren't in the headlines right now, I want to alert you to the potential for crisis in your district. Some of your constituents face disconnection of utility service because they're living on the edge and can't make ends meet. They're still paying for last year's winter's heating bills, incurring costs for air conditioning and trying to budget for other life necessities." Although the chill of the coldest November and December in Missouri history are behind us, the effects are still being felt by Missourians struggling to pay heating bills from last winter. "I am not comfortable with the idea that families who lose gas or electric service will suffer during extreme weather conditions," Chairman Simmons stated in his letter to the Missouri Congressional delegation. "This past winter's high natural gas bills have had a tremendous impact on the already strapped budgets of a large number of low-income and senior citizen families in Missouri. We simply must find a way to help those in need." Many of the investor-owned energy utilities report higher numbers of residential customers (79,000 natural gas heated households) unable to fully pay for their energy bills. Chairman Simmons' concerns were focusing on natural gas heated households. Weatherization can help customers to use energy more efficiently and reduce their winter heating bills.

B. Are natural gas costs expected to increase during the 2002/2003 winter heating season?

A. Yes. According to the U.S. Department of Energy's Short-Term Energy Outlook revised on November 8, 2002, home heating costs are expected to generally increase this heating season. While fuel supplies should remain sufficient under normal weather conditions, high oil prices and an expected increase in the demand for heating fuels will likely generate higher winter fuel bills for most residential customers, relative to their heating bills in the winter of 2001-2002. Winter heating expenditures for household using natural gas are projected to increase by approximately twenty-five percent (25%).

Q. Do you have information regarding the success of utility-based weatherization assistance programs?

A. Yes. Pursuant to the terms and conditions of a stipulation and agreement filed and approved in AmerenUE's (UE) Case No. GR-97-393, UE implemented an experimental weatherization program for a two-year period ending on March 31, 2000 that was funded at $150,000 per year. In accordance with UE's last gas rate case, Case No. GR-2000-512, the Missouri Public Service Commission supported and approved on October 17, 2000 a continuation of the weatherization program, funded by UE at an annual rate of $125,000 per year.

The UE experimental weatherization program was modeled after the federal Low-Income Weatherization Program administered on a statewide basis by the Missouri Department of Natural Resources Energy Center. Weatherization services were provided through community action agencies, which the Energy Center also contracts with to provide weatherization services in the administration of the federal weatherization program.

The East Missouri Action Agency, Inc. (EMAA) located in Park Hills, Missouri participated in the UE experimental weatherization project. The EMAA weatherized 72 homes. Based on

the U.S. Department of Energy's National Energy Audit (NEAT) procedure, the 72 homes weatherized had an average benefit-to-cost ratio of 3.37 to 1; $3.37 saved for each dollar invested.

C. Can you provide additional examples of utility-based weatherization assistance programs?

Yes. Since 1994, the Kansas City, Missouri, Department of Housing & Community Development (KCDHCD) and Missouri Gas Energy (MGE) have administered a joint low-income weatherization assistance program. In May 1999, TecMRKT Works, an independent consulting firm with offices in Oregon and Wisconsin, issued an evaluation of the MGE weatherization program.

The evaluation titled An Impact Evaluation of Missouri Gas Energy Low-Income Weatherization Program provided a detailed analysis on the effectiveness and value of the KCDHCD and MGE low-income weatherization program. The evaluation noted the following benefits:

(1) Customer's improved ability to pay their gas bill and significant dollar savings as a result of the program;

(2) High customer satisfaction with the program;

(3) Reduced arrearages; and

(4) Reduced collection costs.

By reducing arrearages, the number of utility service shutoffs and utility billing collection costs, there was a direct benefit to all residential ratepayers. This effective energy-efficiency program also reduced the amount or need for fuel payment assistance provided by federal and private resources.

Between its inception and March 1999, the Missouri Gas Energy Low-Income Weatherization Assistance Pilot Program served 343 clients providing an estimated savings of $61,720 a year in 1997 dollars or $1,167,540 over the 20 year life of the installed measures.

On average, households using natural gas for space-heating, domestic hot water and cooking reduced their consumption by 34.4 million BTUs annually, or 20.9 percent of ***total gas consumption***, for a program-wide savings of 296 billion BTUs over the 20 year life of the installed measures. This gas savings was provided through a 28.2 percent reduction in ***space-heating- related*** gas consumption and an 8.5 percent increase in *baseload* consumption and provided each customer with annual savings of $155 dollars.

In addition, the program provided electric savings of 500 kWh per year per customer, or about $35.00 per year off the average bill. The benefit-to-cost ratio for the program was 1.62 to 1; $1.62 saved for each dollar invested.

Also in 1999, Oak Ridge National Laboratory completed a comprehensive evaluation of the national Weatherization Assistance Program and found the federal program to have a benefit-to-cost ratio of 1.51 to 1; $1.51 saved for each dollar invested.

D. What are some of the general benefits of low-income residential weatherization?

A. As noted earlier in my testimony, home heating is a high cost for individuals with low income. Overall, low-income households spend approximately 14 percent of their income on energy needs. This percentage compares with energy expenditures of only 3.5 percent of income for non-low-income households. The decision and ability to pay one's utility bill often compete with other necessities. Many low-income individuals live in older homes equipped with older, less-efficient heating systems and generally lack energy-efficiency

items such as insulation. Weatherization reduces space heating fuel consumption by an average (including all heating fuels) of 18.2 percent. Specifically for homes using electricity for heat, weatherization reduces space heating fuel consumption by 35.9 percent. For natural gas homes, annual space heating fuel consumption is reduced by 33.5 percent. (Source: "Progress Report of the National Weatherization Assistance Program," Oak Ridge National Laboratory, September 1997.) Weatherization is a cost-effective means to help low-income individuals or families pay their energy bills year after year for the life of the energy-efficiency product. Weatherization reduces the amount of state and federal assistance needed to pay higher utility bills, keeps money in the local economy, results in a positive impact on the household's promptness in paying utility bills, reduces arrearages and helps to reduce environmental pollution through energy efficiency.

Q. Are there utility benefits from low-income energy efficiency services?

A. Yes. In addition to looking at energy-efficiency from the household perspective, it is beneficial to examine the benefits of a low-income energy-efficiency program from the perspective of energy service providers. Extensive research has found that low-income energy-efficiency programs result in substantial non-energy savings to utilities. These non-energy savings include reductions in working capital expense, uncollectible accounts, credit and collection expenses, and others. The Pennsylvania Low-Income Usage Reduction Program (LIURP) for all Pennsylvania utilities is an example of benefits derived for low-income households to whom energy efficiency was delivered. A payment of less than 100 percent means the specified low-income household did not completely pay the current month's utility bill. In contrast, a payment exceeding 100 percent means the low-income household not only paid the current bill, but paid off its arrears as well. For every

Pennsylvania utility but one, the delivery of energy efficiency substantially improved the payment patterns of the treated low-income households. Indeed, the delivery of energy efficiency generally caused a substantial increase in the payment coverage of the household energy bill. In most cases, the low-income household moved from falling further and further behind by failing to pay the current bill to paying the entire current bill and beginning to retire the arrears. (Source: "Structuring a Public Purpose 'Distribution Fee' for Missouri", Fisher, Sheehan & Colton, Public Finance and General Economics consultants, July 1997.)

Q. Can you describe other non-energy-related benefits from energy efficiency improvements?

Yes. In August 1996, Lawrence Berkeley Laboratory released findings showing that energy-efficiency investments in housing often lead to the correction of conditions that place buildings at risk. Such conditions include fire risk, carbon monoxide poisoning, and the like.

R. Has the Low-Income Weatherization Assistance Program received support by any statewide policy development group?

A. Yes. In its October 16, 2001 Final Report, the Missouri Energy Policy Task Force recommended that "the Missouri Public Service Commission should include funding for weatherization of low-income housing as a component of low-income affordability programs". (Source: FINAL REPORT of the Missouri Energy Policy Task Force, October 16, 2001, pg. 12)

As noted in the report, "The program has evolved from humble beginnings applying generic low-technology solutions such as plastic film window covers on storm doors, to building-specific solutions that rely on modern instruments and computerized energy use analyses. The weatherization of low-income housing results in predictable savings and improved comfort and safety. Weatherization of homes seeks to reduce air leaks, improve the

efficiency and safety of major energy systems such as furnaces, and reduce energy losses by insulating the living space. On average, weatherization reduces the consumption of natural gas used to heat a home by 20%." (Source: FINAL REPORT of the Missouri Energy Policy Task Force, October 16, 2001, pg. 10)

Further, "While the persons in weatherized housing experience lower bills, safer living conditions, and more comfortable homes, they are not the only beneficiaries of low-income weatherization. Extensive research has found that low-income energy efficiency programs result in substantial savings to utilities. These non-energy savings include reductions in working capital expense, uncollectable accounts, and credit and collection expenses. Two studies identifying utility benefits from weatherization programs include:

- A March 1998 report on the Missouri Gas Energy Pilot Weatherization Program which found that the program "is successful at reducing customer debt for the participants who save energy and the amount of the arrearage reduction is proportional to the amount of the savings.
- The Pennsylvania Low-Income Usage Reduction Program found that the delivery of weatherization assistance improved the payment patterns of the treated low-income households." (Source: FINAL REPORT of the Missouri Energy Policy Task Force, October 16, 2001, pg. 11)

Q. With regard to this rate case, what funding level would be required to adequately support a well designed low-income weatherization assistance program with long-term benefits?

A. Evidence presented in Laclede natural gas rate case No. GR-2001-629 established a weatherization assistance program funded at $300,000 annually. As I described earlier,

additional funding is needed to address the growing number of low-income households served by Laclede.

The Energy Center recommends that Laclede implement an effective low-income assistance program by using the $600,000 annual fund from the proposed Catch-Up/Keep-Up program to support a low-income weatherization assistance program based on the federal guidelines used to administer the statewide Weatherization Assistance Program. Such a program would result in long-term and sustainable benefits.

Presuming a benefit-to-cost ratio of 1.51 to 1, that is, for every dollar spent, a benefit of $1.51 would be returned, a $600,000 investment in weatherization assistance by Laclede over the 20-year life of the energy conservation measures installed would provide a benefit return of approximately $18.1 million.

Q. Does this conclude your testimony?

A. Yes. Thank you.

Ronald Wyse, Program Director, Business and Industry Program, Energy Center, Missouri Department of Natural Resources, being duly sworn on his oath hereby verifies that the above facts are true and correct to the best of his knowledge, information and belief.

Ronald Wyse

Subscribed and sworn before me this 18th day of November 2002.

Notary Public

My commission expires: KAY A. JOHANNPETER
NOTARY PUBLIC, STATE OF MISSOURI
MONITEAU COUNTY
My Commission Expires 8-4-2003

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was mailed, postage prepaid, by United States mail, this 18th day of November, 2002, to:

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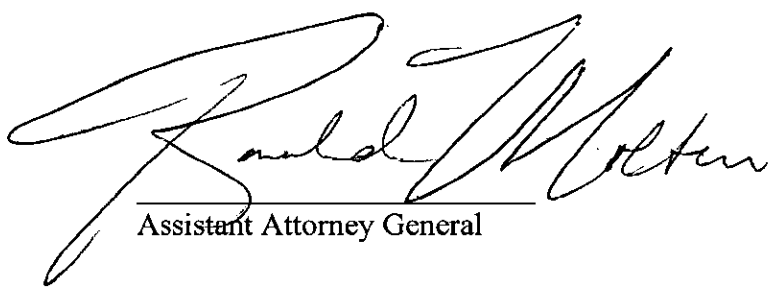

Assistant Attorney General