Exhibit No.:	
Issues:	Commitment to Provide Low or No Cost Weatherization Assistance to AmerenUE Low-Income Customers and Energy Efficiency Services to Residential and Commercial Customers.
Witness:	Anita C. Randolph
Sponsoring Party:	Missouri Department of Natural Resources' Outreach and Assistance Center, Missouri Energy Center
Type of Exhibit:	Testimony
Case No.:	EC-2002-1

AMEREN UE EARNINGS COMPLAINT CASE

REBUTTAL TESTIMONY

OF

ANITA C. RANDOLPH

MISSOURI DEPARTMENT OF NATURAL RESOURCES

ENERGY CENTER

March 20, 2002

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI
TESTIMONY OF
ANITA C. RANDOLPH
DIRECTOR
MISSOURI DEPARTMENT OF NATURAL RESOURCES
ENERGY CENTER

CASE NO. EC- 2002-1

appointed director of the Energy Center, formerly the Division of Energy, by Mr. Stephen Mahfood, director of the Missouri Department of Natural Resources.

Q. What is the purpose of your direct testimony in these proceedings?

A. The purpose of my testimony is to focus on the proposed electric rate decrease, low-income residential customers served by Ameren UE and the need for low-income weatherization assistance, and opportunities to promote utility-based energy efficiency services for residential and commercial customers.

The Energy Center is seeking commitment by AmerenUE to provide additional funding for weatherization assistance for their low-income residential customers and utility-based energy efficiency services and programs for residential and commercial customers.

Pursuant to the terms and conditions of a stipulation and agreement filed and approved in Case No. GR-97-393, AmerenUE implemented an experimental weatherization program for a two-year period ending on March 31, 2000 that was funded at the level of $150,000 per year. Following the company's last gas rate case (Case No. GR-2000-512), by Order Approving Unanimous Stipulation and Agreement dated October 17, 2000, the company implemented a new weatherization program, funded by the company at an annual rate of $125,000. The details of the program were determined through a collaborative process among representatives of the company, Staff, the Public Counsel and the MoDNR.

Q. Do you have information regarding the success of the experimental weatherization program?

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

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)

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. It is difficult to quantify the precise number of low-income units in Missouri that are in need of energy-efficiency improvements. According to the state Weatherization Assistance Program (WAP) which is administered by the Energy Center, from 1978 (beginning of the program in Missouri) through June 30, 2001, a total of 138,429 homes were weatherized in Missouri. The Energy Center estimates an additional 450,300 eligible homes remain. (In FY 2001, the eligibility was increased from 125 to 150% of the poverty level in response to last 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 funding levels prior to FY 2003, it would take more than 150 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 is continued, it would still take 104 years to complete all of the eligible homes in Missouri. Clearly, on-going and additional sources of low-income energy-efficiency services are needed.

service territory. At current resource levels, it would take approximately 74 years to serve the AmerenUE low-income residential clients.

Q. 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 only 3.5 percent of 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

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 high 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. Although Chairman Simmons' concerns were focusing on natural gas heated households, this situation also occurs in electric heated households. Weatherization can help customers to use energy more efficiently and reduce their winter heating bills.

Q. What funding level would be required to adequately support AmerenUE's low-income weatherization assistance program?

A. Evidence presented in Case No. GR-2000-512 established that the company provides service to approximately 123,000 natural gas customers in 90 Missouri counties. A total annual revenue outlay of $125,000 or approximately $1 per customer, was dedicated to low-income weatherization assistance. The company currently provides service to approximately 1.2

Missouri", Fisher, Sheehan & Colton, Public Finance and General Economics consultants, July 1997.)

In its August 29, 2001, final report, the Missouri Public Service Commission's Natural Gas Commodity Price Task Force recognized the need for energy efficiency programs by its recommendation that "the Commission should pursue incentive measures for encouraging energy efficiency." The report included this explanation of the need for efficiency programs: "Effective energy efficiency programs can address the barriers that inhibit customers from making investments in energy efficiency improvements – lack of money or competing demand for available funds, the perception that up-front costs are more important than long-term savings and lack of technical expertise."

Q. Briefly describe the benefits of residential and commercial utility-based energy-efficiency services.

A. The Missouri Energy Policy Task Force recommended in its October 16, 2001 final report, that "Missouri pursue incentives funded through various sources to encourage the increased development of energy efficiency and renewable energy to provide for a more secure energy future." The Task Force report cited the following benefits to customers, utilities, the economy and the environment: "Missourians would benefit greatly from investments in energy efficiency and renewable resource programs. Efficiency programs provide assistance to customers by helping to reduce their energy usage and utility bills, which is particularly important when energy prices are high and volatile. System reliability and resilience are improved by reducing vulnerability to disruptions in energy supplies through efficiency and a diversified fuel mix. Long-term costs can be lowered by reducing expenditures by gas and electric utilities to upgrade their infrastructure to meet increasing demand. Investments in

The U.S. Department of Energy addressed the economic benefits of commercial efficiency programs in a 1995 report "U.S. Electric Utility Demand-Side Management (DSM): Trends and Analysis". In a detailed analysis of verified savings achieved, 20 utility commercial lighting programs were reviewed. All 20 programs were found to be cost-effective when compared to program-specific avoided costs (Source: The Cost and Performance of Utility Commercial Lighting Programs, Lawrence Berkeley Laboratories, May 1994). A more comprehensive review of evaluations for 40 large commercial programs that accounted for one-third of 1992 utility DSM spending was completed by Lawrence Berkeley Laboratories for the U.S. Department of Energy. The majority of the programs reviewed, which accounted for 88 percent of utility and consumer spending on programs included in the study, were cost-effective. For all the programs analyzed, the savings weighted average ratio of total resource benefits to total resource costs was 3.2 to 1 (Source: The Cost and Performance of the Largest Commercial Sector DSM Programs, Lawrence Berkeley National Laboratory, December 1995). Eight of the programs reviewed in the study had total resource costs at or below 2 cents per kilowatt hour. Lawrence Berkeley Laboratories found that, overall, utilities demonstrated a capability to undertake highly cost-effective energy-efficiency programs.

Q. Briefly describe utility-based energy-efficiency services available today.

A. Several utilities throughout the nation continue to offer energy efficiency services and programs to their customers. These energy efficiency measures include residential and commercial energy audits, consumer education, and rebates or low-interest loans for the purchase of new products such as efficient water heaters, lights, showerheads, air

supply-side resources. Economic comparisons of efficiency and supply-side investments require that consideration of the life-cycle cost of the options are addressed on an integrated basis, such as the interaction of the change in usage patterns with the generation function of the utility must be considered over the expected life of the options. (Source: "Electric Utility Demand Side Management 1998," U.S. Department of Energy, Energy Information Administration.)

While cost calculations will vary by region and individual utility, the U.S. Department of Energy (USDOE) has used the cost of energy in cents per kilowatt hour (kWh) saved as an index for making approximate comparisons between the cost of energy efficiency programs and new generation plants.

USDOE data collected from surveys of 63 percent of reporting utilities in 1994 indicated that the cost of energy efficiency programs was competitive with or below the cost of new generating capacity. The average costs of achieving conserved energy were reported at under 3 cents per kWh while the cost for new generation facilities ranged from 2 to 15 cents per kWh on a significant number of days per year. During capacity shortages, prices could increase to 50 cents per kWh or higher, reflecting the cost of building new generation to serve peak loads or the price signals that might be required to match demand to available supply if power must be purchased on the spot market.

In a more recent report issued by the Rocky Mountain Institute this year (2001), it was found that the average cost of implementing energy efficiency has been 2 cents per kWh with the best-designed programs costing less. In contrast, each kWh generated by an existing power plant cost 5 cents or more.

Energy Policy Act of 1992 (to adopt a state-wide commercial building efficiency standard by 1995), the result would have been a reduction in the cumulative consumption of energy by new commercial buildings built between 1995 and 2000 by 4 trillion BTUs, the equivalent of nearly 700,000 barrels of oil per year. The cumulative operating cost savings for Missouri commercial building owners would have been nearly $68 million by the year 2000. The report goes on to say that this potential is "dwarfed by the energy consumption of the pre-1995 standing commercial building stock." It is this existing commercial building stock which would benefit from energy efficiency programs.

Q. What are some of the statistics related to energy efficiency investments and potential nationally?

A. In its March 1990 report "Efficient Electricity Use: Estimates of Maximum Energy Savings," the Electric Power Research Institute, funded by utility companies, estimates that 22 to 44 percent of total U.S. electricity consumption could be saved by using the most efficient technology available in 1990. Nationwide, spending on state energy efficiency programs fell from $1.65 billion in 1993 to nearly half -- $912.5 million in 1998 – at a cost of nearly 15,000 megawatts in power savings. The Environmental Working Group reported in 1998 that through the mid-1990's, programs gradually shrunk as utilities sought to cut cost in preparation for restructuring. As programs shrunk, so did savings, contributing to high demand growth and current reliability problems. As a result, Americans forfeited $1 billion in savings on electric bills as of 1997. These savings would have continued every year for the subsequent 10 years, a total of at least $10 billion in consumer savings lost due to cuts in energy efficiency programs by utilities, inspired largely by utility deregulation.

STATE OF MISSOURI
PUBLIC SERVICE COMMISSION

Staff of the Missouri Public Service Commission, Complainant, V. Union Electric Company, D/B/A AmerenUE, Respondent	)))))	Case No. EC-2002-1

AFFIDAVIT OF ANITA C. RANDOLPH

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Anita C. Randolph, being duly sworn on her oath, hereby states that she has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form; that the answers in the foregoing Rebuttal Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters were true and correct to the best of her knowledge, information and belief.

Anita C. Randolph

Kay A. Johannpeter
Notary Public

My commission expires:

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

Subscribed and sworn before me this 21st day of March 2002.