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Witness:	Brenda Wilbers
Sponsoring Party:	Missouri Department of Natural Resources - Energy Center
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AMERENUE ELECTRIC RATE CASE

DIRECT TESTIMONY

OF

BRENDA WILBERS

MISSOURI DEPARTMENT OF NATURAL RESOURCES

ENERGY CENTER

December 15, 2006

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

DIRECT TESTIMONY OF BRENDA WILBERS

MISSOURI DEPARTMENT OF NATURAL RESOURCES
ENERGY CENTER

CASE NO. ER-2007-0002

NP

Q. Please state your name and address.

A. My name is Brenda Wilbers. My business address is Missouri Department of Natural Resources, Energy Center, 1101 Riverside Drive, 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 Energy Policy and Analysis Program in the Missouri Energy Center (MEC). The MEC is located within the Missouri Department of Natural Resources, Policy Division, an agency of state government with its executive office located in Jefferson City, Missouri.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of the Missouri Department of Natural Resources Energy Center (MEC), an intervener in these proceedings.

Q. Please describe your educational background and business experience.

A. I received a Bachelor of Science degree in 1985 from Lincoln University and a Master of Public Administration degree in 1996 from the University of Missouri-Columbia. I have worked as a performance auditor for the Missouri Joint Committee on Legislative Research. In this capacity, I participated in performance reviews of various state agencies and prepared fiscal notes for legislative proposals. Prior to becoming the director of the Energy Policy and Analysis Program in 1999, I worked as an environmental policy analyst in the Department of Natural Resources Director's Office for two years. From 1991 to 1999, I was an energy planner in the Energy Center. As director of the Energy Policy and Analysis Program, my areas of responsibility include analysis and development of energy policy recommendations, legislative issues, strategic planning, energy emergency planning, monitoring energy prices

and supplies, and working with energy utilities and other partners to develop energy efficiency programs and assessments of Missouri's wind energy.

Q. Have you filed testimony in other cases before the Missouri Public Service Commission?

A. Yes. I filed testimony in ER-2006-0315, Empire District Electric Company's rate case.

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

A. The purpose of my testimony is to address AmerenUE's commitments to demand side management (DSM) programs and wind energy.

Q. Please describe UE's commitment to DSM programs in this rate case.

Mr. Michael Moehn describes a process for development of a 'sustainable energy plan' that results in reductions in energy and peak demand growth. After this process "AmerenUE will evaluate opportunities, develop action plans, and develop implementation plans that are expected to result in meaningful levels of reduced energy and peak demand growth. In the context of this rate proceeding, AmerenUE is willing to consider other ways to implement beneficial demand side programs, and looks forward to working with stakeholders involved in this case to do so." Mr. Moehn also proposes near-term reductions in annual energy and capacity growth and long-term capacity goals. "Reasonable near-term reductions could be 10% of both annual energy and capacity growth. Long-term capacity goals, depending upon how market prices develop, may be as high as 300 MW as modeled in the AmerenUE IRP filing." (Moehn direct, pg. 16-17)

Q. Do you believe this commitment to energy efficiency is adequate?

A. No. MEC supports a process with public participation from stakeholders in the development of a sustainable energy plan; however, the energy plan must include a meaningful ongoing

commitment to implement DSM programs in order to achieve significant and cost-effective benefits for UE customers, the electric system, the economy and the environment. I am pleased that Mr. Moehn has proposed targets for reductions in energy and capacity and expressed a desire to work with stakeholders to develop implementation plans that are expected to meet these targets through DSM programs. I would like to acknowledge Mr. Moehn's desire to implement DSM programs in the context of this rate proceeding and propose how this can be achieved in coordination with UE's current DSM analysis process that was initiated as a result of an agreement between Staff and AmerenUE in AmerenUE's Integrated Resource Plan compliance filing in Case No. EO-2006-0240.

Q. How is AmerenUE's DSM analysis related to the selection of DSM programs in the context of this rate case?

A. In its December 2005 resource plan filing, UE did not adequately consider demand-side resources but instead chose to perform limited 'placeholder' analysis. As a result, the extremely limited DSM analysis and screening were not credible and resulted in incomplete and incorrect estimates of program benefits, costs and market potential and the incorrect selection of candidate demand-side programs as well as calling into question UE's selection of its preferred resource plan that did not include any DSM programs. Because of this, specific DSM programs have not been selected for implementation, making it difficult to recommend specific programs in the context of this rate case before completion of the DSM analysis process.

Q. Is DNR involved in UE's DSM analysis process?

A. Yes. DNR participated in development of a Request for Proposal for a DSM consultant and interviews of firms submitting proposals. DNR is hopeful that this process will include

analysis of demand-side resources on an equivalent basis with supply-side resources as required by the Commission's Electric Utility Resource Planning rule (4 CSR 240-22.010-22.080).

Q. Why should AmerenUE invest in energy efficiency?

A. Energy efficiency is often one of the most cost-effective ways to address the challenges of growing energy demand, higher energy prices, and concerns over energy security and independence, reliability and environmental quality. Energy efficiency programs provide a means by which consumers and businesses can save money through lower electric bills. Increasing energy efficiency will reduce load growth, diversify energy resources, enhance the reliability of the electricity grid, reduce air pollution and emissions, mitigate electricity and fuel price increases and reduce customer exposure to price volatility. Energy efficiency does not rely on any fuel and is not subject to shortages of supply or increased prices for natural gas or other fuels.

Q. Are other utilities implementing energy efficiency programs?

A. Yes. In Missouri, regulated electric and gas utilities and municipal electric utilities are implementing a number of energy efficiency programs. Energy efficiency programs have been and continue to be successfully implemented in other states across the nation in regulated and unregulated markets and by utility, state and third-party administration; investor-owned, public utilities and cooperatives; and gas and electric utilities. According to the National Action Plan for Energy Efficiency (NAPEE)[1], many established energy

[1] The National Action Plan for Energy Efficiency (NAPEE) is a plan developed by more than 50 electric and gas utilities, state utility commissioners, state air and energy agencies, energy service providers, energy consumers and energy efficiency and consumer advocates, together with the US Department of Energy and the US Environmental Protection Agency. The plan was released in July 2006.

efficiency programs[2] are being delivered at total program costs of approximately $0.02 to $0.03 per kilowatt-hour (kWh) saved and $1.30 to $2.00 per million British thermal units (MMBtu) saved. The funding for the majority of energy efficiency programs reviewed in the NAPEE ranges from 1 to 3 percent of electric utility revenue and 0.5 to 1 percent of gas utility revenue. (NAPEE, p. 6-5)

Q. What is Missouri's level of spending on electric energy efficiency?

A. Missouri was ranked 43rd in electric energy efficiency spending at 0.01 percent of utility revenues by the American Council for an Energy Efficient Economy (ACEEE) in its review of all 50 states. The seven states ranking lower than Missouri are Maryland, Nebraska, North Carolina, Kansas, District of Columbia, Delaware, Virginia and Wyoming. Missouri is also ranked 43rd in electric energy efficiency spending per capita at $0.06.[3]

Q. Are energy efficiency goals used in other states?

A. Yes. The ACEEE recommends basing an energy efficiency resource standard (EERS) on a percentage of *total* annual sales at retail as opposed to a percentage of annual load *growth* because targets based on growth in sales are the most uncertain and can vary substantially from year to year depending on economic factors and weather. However, states have adopted both approaches. Texas and Illinois have energy efficiency goals set as a percentage of forecasted load growth. Texas was the first state to establish an EERS with its electricity restructuring law in 1999. Texas' goal is for end use energy efficiency programs to meet 10 percent of load growth measured in megawatts (MW) using a five-year historical rolling

[2] Energy efficiency programs reviewed by NAPEE include: New York State Energy Resource Development Authority (NYSERDA), Efficiency Vermont, Massachusetts Utilities, Nevada, Connecticut Utilities, San Francisco Municipal Utility District (SMUD), Seattle City Light, Austin Energy, Bonneville Power Authority (BPA) Minnesota Electric and Gas investor-owned utilities, Wisconsin Department of Administration and California utilities.

[3] ACEEE's 3rd National Scorecard on Utility and Public Benefits Energy Efficiency Programs: A National Review and Update of State-Level Activity, York and Kushler, October 2005, Report Number U054.

average. This approach reduces the impact of annual fluctuations in growth on the goal. Because Texas utilities have been achieving this goal relatively easily, there is reportedly discussion in that state about increasing the goal to 50 percent of load growth. Illinois currently has voluntary goals of 10 percent of forecast load growth starting in 2006-2008 and increasing to 25 percent of load growth for the period 2015-2017. Little progress in achieving this goal has been made however, because implementation has been delayed for various reasons.

Connecticut, Hawaii, Nevada, Pennsylvania and New Jersey use percentage of total annual retail sales to establish reduction goals. California and Vermont have goals with absolute kilowatt-hour (kWh) reductions. In Colorado, a settlement agreement was approved by the Public Utility Commission for Public Service of Colorado (the major utility in the state) to make best efforts to achieve savings targets of 320 MW and 800 gigawatt-hours (GWh) from 2006-2013 (40 MW and 100 GWh each year).[4]

Q. In the context of this rate proceeding, what commitment to DSM do you propose for AmerenUE?

A. MEC recommends that UE complete the DSM analysis process that is currently underway (in consultation with stakeholders and the DSM consultant) and make an ongoing commitment to implement a robust combination of demand response and energy efficiency programs that are selected as a result of the DSM analysis beginning upon completion of the process but no later than the first quarter of 2008.

The Commission should set the DSM goals to achieve 10 percent reduction in peak demand and energy growth by 2009/2010; 15 percent by 2011/2012; 20 percent by 2013/2014 and 25

[4] "Energy Efficiency Resource Standards: Experience and Recommendations," Steven Nadel, American Council for an Energy efficient Economy, March 2006 (ACEEE Report E063)

percent by 2015/2016. UE should incorporate the short-term energy reduction goals of 10 percent in energy and peak demand growth in the current DSM analysis process for development of its preferred resource plan for its 2008 compliance filing. These goals should be used to guide the appropriate levels of funding for DSM programs, that are determined to be consistent with the provisions of the Electric Utility Resource Planning Rule (4 CSR 240-22.010 to 22.080). UE should commit to adequate funding to achieve these energy reduction goals that begins at $10 million per year and ramps up to annual DSM program funding of one percent of UE's Missouri annual sales revenue or a minimum of $20 million per year by 2010. Providing a framework of increasing goals allows for ramp-up of DSM programs and development of the appropriate infrastructure for program delivery. Stakeholders including the Public Service Commission staff and the Office of the Public Counsel should determine how progress toward meeting these goals is calculated and monitored as well as reviewing the energy reduction goals to determine if they should be increased. MEC recommends a multi-year average of annual load growth in retail sales be used in the calculation of the energy savings goals to mitigate the potentially significant variations in annual retail sales growth.

Q. What would be the impact of the proposed energy reduction goals?

A. It is difficult to accurately estimate the potential impact of the energy efficiency goals proposed by Mr. Moehn because of the limitations in UE's DSM analysis in its 2005 IRP filing. *** [redacted] .*** However, in comparison to other states and utilities, the goals starting at 10 percent and increasing to 25 percent of peak demand and energy reductions in annual growth

appear to be very reasonable and achievable considering the low level of energy efficiency activities in Missouri in the past. However, MEC believes it is at a level that will have a meaningful impact on load growth after a period of sustained commitment to DSM. Market transformation, customer education, effective partnerships and support infrastructure for program delivery can only be built through an ongoing DSM commitment.

Based on Mr. Moehn's proposed long-term capacity goal of "as high as 300 MW as modeled in the AmerenUE IRP filing," it appears to be primarily directed to *demand response and load management* programs based on the following reference: UE's "preliminary analysis indicated potential load reductions attributable to demand-side initiatives over the 20-year planning horizon as high as 350 MW. However the bulk of those initiatives were attributable to the real time pricing (RTP) 'family' of potential demand side initiatives." (EO-2006-0240 AmerenUE's Response to May 19, 2006 Reports and Comments Attachment A, pg. 2 of 11, September 15, 2006) Energy efficiency programs should be an integral part of meeting any short-term and long-term energy reduction goals.

Q. Are there barriers to utilities investing in energy efficiency?

A. Yes. While some utilities are managing energy efficiency programs to diversify their portfolios, lower costs and meet customer demand, many still face important financial disincentives to implementing the programs. Traditional ratemaking approaches have a strong link between a utility's financial well-being and the volume of electricity or gas sold, creating a disincentive to invest in cost-effective DSM programs that reduce sales. Some states are modifying regulatory policies to remove this disincentive and in some cases to provide an incentive to promote energy efficiency investments.

Q. Has Missouri addressed this utility disincentive for energy efficiency?

A. Missouri has taken a step in the direction of addressing this financial disincentive for Kansas City Power & Light Company and Empire District Electric Company. In regulatory plans approved by the Commission, these utilities are allowed to accumulate the costs of implementing energy efficiency, affordability and demand response programs in regulatory asset accounts as the costs are incurred. Costs are amortized over a ten-year period and amounts not included in rate base are allowed to earn a rate of return. While this approach helps to reduce the financial impact of implementing energy efficiency programs by spreading the cost over a number of years, it does not address the impact of reduced sales.

Q. Do you propose a similar approach for AmerenUE?

A. Yes, I think this approach in which energy efficiency program costs are placed in a regulatory asset account should also be available to UE.

Q. What is the status of AmerenUE's current DSM programs?

A. Subject to expenditures of any remaining energy efficiency program funds in the EO-2002-1 case, the stipulation and agreement expired on June 30, 2006. Separate funding amounts for two areas of energy efficiency programs (1) residential and commercial programs and (2) low-income weatherization in EO-2006-0240 were stipulated to be $4 million over a four-year period.

Q. Does AmerenUE support continuation of its current DSM programs?

A. Mr. Richard Mark describes low-income assistance and energy efficiency programs that UE has funded as a result of Case No. EC-2002-1. He stated that UE is willing to consider continuing these kinds of programs or in developing new or additional programs and that UE is willing to work with stakeholders and the Commission to do so where appropriate (Mark direct, pg. 17). However, UE did not include funding for low-income weatherization or other

DSM programs in this rate case filing. UE did not include any DSM programs in its preferred resource plan from its December 2005 compliance filing. Although UE has undertaken a DSM analysis process that is expected to result in an implementation plan, it is assumed that these programs would not be implemented until after its 2008 resource plan is filed, which may not result in actual implementation of DSM programs (if weatherization is included in UE's preferred resource plan filed in 2008) until 2009-2010.

Q. Do you recommend continuation of AmerenUE's current DSM programs?

A. I recommend that UE continue to fund its weatherization program so there is not a disruption in services to UE's low-income electric customers. I recommend that the pilot residential and commercial energy efficiency programs should continue to be implemented using the remaining funds from the EC-2002-01 case until expended. MEC is not requesting additional funding for the pilot residential and commercial programs in this rate case because it is assumed that UE's current DSM analysis will result in implementation of a robust combination of demand response and energy efficiency programs; and because these were pilot programs, I recommend that the program evaluations (when completed) be considered in the development and design of larger-scale programs in UE's DSM implementation plan.

Q. What level of funding do you recommend for AmerenUE's weatherization program?

A. MEC requests that UE continue to support the company’s weatherization program established in Case No. EC-2002-01 for its electric customers at an annual funding level of $1.2 million until UE’s next rate case or until such time the commission rescinds the program by Order. UE should continue to work with the community action agencies that administer the program within UE’s electric service territory. MEC proposes that the first distribution of these weatherization funds to the affected community action agencies be

made in October 2007 to assure there is no interruption in program services. The last distribution of weatherization funding from UE pursuant to EC-2002-01 was made in July 2006. In each of the previous three years of the program, the community action agencies in UE's electric service territory expended the annual distributions.[5] At an annual funding level of $1.2 million, the cost per customer would be $0.09 per month to fund the weatherization program ($1,200,000/1,161,545 electric customers/12 months = $0.09).

Q. Why should weatherization be funded separately from the programs to be determined in the DSM analysis process?

A. As UE electric rates increase, it becomes financially more difficult for many residential customers to consistently pay their monthly utility bills when they are due. Low-income residential customers, in particular, face even greater hardships as they meet the challenge of energy expenses on a small and/or fixed household income. The weatherization program can provide long-term benefits to customers by helping reduce energy demand that result in reduced energy bills and help reduce late payment or uncollectible utility bills.

There is an ongoing need for low-income weatherization assistance and funding for this important program should not be interrupted. As of November 2006 there were approximately 2,800 people on waiting lists throughout the state. Of this amount, a total of 678 households were UE customers with 558 receiving electric service and 120 receiving gas service. If the 558 electric customers currently on the waiting list received weatherization services at an average cost of $2,160 per home (based on actual program costs ending June 30, 2006), the cost would be over $1.2 million. On average, the waiting list for

[5] The Stipulation and Agreement in Case No. EC-2002-1 provided that AmerenUE contribute $2 million to weatherization in 2002 and subsequent annual contributions of $500,000 on June 30 of 2003, 2004, 2005 and 2006 for a total of $4 million over the four-year period. To levelize the funding and level of community action agency staff resources, DNR distributed $1 million each year to the agencies.

weatherization services stays fairly consistent throughout the year. For example, when one home is weatherized and removed from the waiting list, another home is typically added. Because of the importance and ongoing need for weatherization services in UE's service territory, funding for this program should not be interrupted pending completion of the DSM analysis process.

Q. Please describe UE's commitment to wind energy.

A. In UE's 2005 IRP filing, interveners identified deficiencies in how UE modeled wind generation. UE modeled only 100 MW of wind capacity, an amount insufficient to allow an accurate assessment of the value of wind in its generation mix of over 10,000 MW. The extent to which wind generation could reduce the amount of gas and coal burned, and mitigate the risk of potential greenhouse gas regulations was also not analyzed. Based on its analysis, UE did not include wind in its preferred resource plan. In an agreement with Staff, UE has agreed not to limit its analysis to 100 MW of wind power and to evaluate wind in its 2008 IRP filing. In his direct testimony, Michael Moehn stated "AmerenUE is willing to commit to adding 100 MW of wind power to its generating fleet by 2010." Mr. Moehn conditions this commitment, however, on the assumption "that construction of such wind power generation proves to be technologically feasible, and that the stakeholders in this proceeding are supportive of this proposal." (Moehn, direct, p.17)

Q. Do you support AmerenUE's proposal to add 100 MW of wind power by 2010?

A. I support fuel diversity and including clean energy sources in a utility's portfolio of resources because of their environmental, economic and energy security benefits. I think UE should not limit its commitment to install 100 MW of wind by 2010, but inclusion of wind in its portfolio at various levels should be based on a robust analysis of its costs and benefits that

includes environmental risk mitigation benefits. However, because of UE's limited IRP analysis of wind in its 2005 resource plan filing, it is difficult to determine how cost-effective an investment in 100 MW or more of wind power would be for UE. The location of turbines at sites with good wind resources greatly affects cost-effectiveness. UE should use publicly available data from tall tower wind assessments in this analysis. Rick Anderson will provide testimony on wind energy data available for this purpose.

Q. Do you have testimony on Taum Sauk?

A. DNR has been repeatedly assured both publicly and privately by UE that the utility company will not seek to recover in rates any of the costs or expenses associated in any way with the December 14, 2005, failure of the Taum Sauk Upper Reservoir or any subsequent costs of repair, restoration, or rebuild of UE's facility or other damaged property, or any payments to settle or satisfy any claims or potential claims arising from the event. If UE is seeking any of these costs in the rate case, DNR has extensive testimony to provide. DNR staff who have been directly involved in the investigation could be made available to respond to questions.

Q. Does this conclude your testimony?

A. Yes. Thank you.