

**To:** Maggie Molina, Research Manager, Policy Program  
American Council for an Energy-Efficient Economy (ACEEE)  
**From:** Ameren Missouri and KCP&L  
**Date:** June 13, 2011  
**Subject:** Review of Draft ACEEE Report: "MISSOURI'S ENERGY EFFICIENCY POTENTIAL:  
OPPORTUNITIES FOR ECONOMIC GROWTH AND ENERGY SUSTAINABILITY"

Dear Ms. Molina,

Thank you for the opportunity to review and comment on the June 1, 2011 draft of the above referenced ACEEE Report. Because the report has the potential to be very influential in future Missouri energy policy, the undersigned utilities share grave concerns should it be accepted and acted upon in its current form. The utilities believe that the draft does not reflect an accurate picture of the realistic energy efficiency potential.

The utilities fundamentally disagree with the ACEEE policy recommendations for statewide electric Energy Efficiency Resource Standards (EERS) and the methodologies ACEEE used in support of its study.

The basis for ACEEE's recommended EERS annual load reductions is primarily the KEMA Missouri Statewide DSM Potential Study, issued on March 4, 2011 and revised multiple times, with the last revision issued on April 14, 2011. The KEMA report is fundamentally flawed and should not be used as the basis for assessing energy efficiency policy in Missouri. The flaws that Missouri stakeholders identified are well documented and cover the gamut from input measure level costs and savings errors, out-of-date avoided energy costs, model methodological errors, lack of transparency, use of secondary and tertiary data rather than Missouri specific data, confusion as to how to report net vs. gross energy savings, and issues with project management.

The KEMA Missouri Statewide Study results were rejected by the MPSC Staff in response to questions from the bench at the recent Ameren Missouri rate case hearing. The record indicates that MPSC would have concerns about relying on the KEMA study to make Missouri energy efficiency policy decisions.<sup>1</sup> Yet, ACEEE did the exact opposite and proceeded to base such policy recommendations on the KEMA Study. Furthermore, ACEEE chose to select the highest DSM potential estimate in the study, which was dismissed as inappropriate by MPSC Staff, and relegated from the main body of the report to an Appendix. The DSM potential estimate in the Appendix was neither vetted nor reviewed with stakeholders. It is important to note that the DSM potential load reductions for this case are more than a multiple of two times the levels reported in the body of the KEMA report.

Compare/contrast the KEMA Missouri DSM Potential study with the Ameren Missouri study; based on primary market research using 4,000 sample points for appliance saturation, customer usage characteristics of electric devices in the home, and customer thinking about energy efficiency and factors that contribute to their willingness to participate in utility sponsored energy efficiency programs. ACEEE chose to reject the results of this Missouri-specific study and accept the results of a study of questionable validity.

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<sup>1</sup> Evidentiary Hearing, May 5, 2011, Jefferson City, Missouri, Volume 26. File No, ER-2011-0028. Pages 1990-1991.

The ACEEE report uses large numbers to make a case for the size and benefit of the energy efficiency resource in Missouri. Yet, a closer review of the numbers cited by ACEEE reveals biases and raises questions. For example, in Table ES-2, ACEEE describes the economic impacts from energy efficiency. By 2025, Missouri's investment in energy efficiency could result in the creation of 9,492 new jobs. In aggregate, those jobs contribute \$265 million in wages. \$265 million divided by 9,492 jobs equates to an average annual wage of \$27,918 in 2009 dollars. That would put the average job 40% below Missouri's 2009 median income of \$45,229<sup>2</sup>.

ACEEE discusses state-led energy efficiency programs beginning on page 17 in the draft report. ACEEE estimates that state-led programs will achieve annual electricity savings of about 240 GWH or about 0.3% of Missouri's electric needs. We are not aware of any plans by Missouri DNR to quantify or evaluate energy savings from DSM programs funded by the Stimulus Recovery Funds or ARRA. This is in contrast to the standard that Missouri electric utilities are held to in regards to accountability for both cost and savings of programs. ACEEE indicates that the ARRA budget administered by DNR is approximately \$226 million. If one makes the assumption that the dollars were spent to achieve energy savings, the ensuing metric of the first cost of the DNR energy efficiency program is \$226 million/ 240 GWH = \$0.94/kwh. Compare/contrast this metric to the average first cost of a DSM program in the typical utility portfolio of \$0.20/kwh.

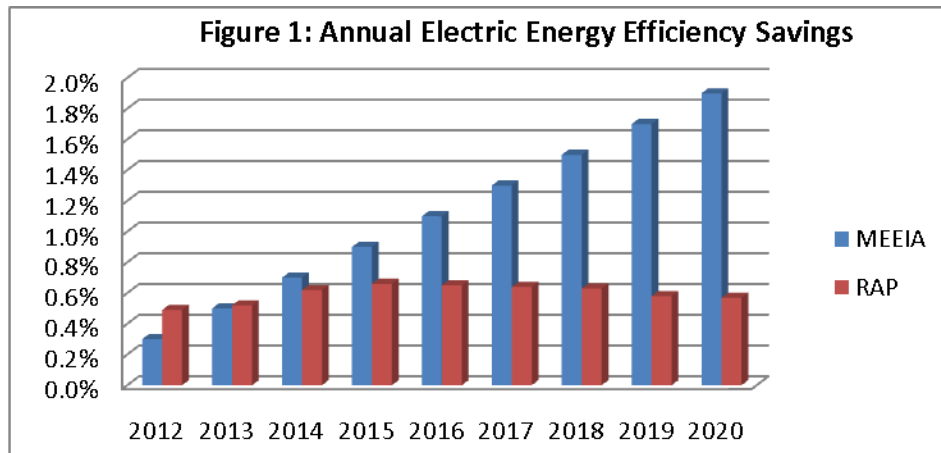
Combining ACEEE's analysis of energy efficiency related job creation in Missouri with the costs and savings from state-led programs could lead to the conclusion that the energy efficiency resource in Missouri costs five times more than the national average, does not require evaluation, measurement and verification, and creates 9,492 below average income jobs.

Other significant discrepancies with reported numbers in the ACEEE draft report include:

1. ACEEE submits that aggressive energy efficiency portfolios can increase savings by larger increments year after year. Just the opposite is true. Incremental savings attributable to energy efficiency measures decrease over time. A case in point is efficient residential lighting technology. The standard 60-watt incandescent light bulb is being replaced with an equivalent 13-watt CFL light bulb – a 78% improvement in efficiency. The technology that will eventually replace the CFL is the LED. The 13-watt CFL will likely be replaced with an equivalent 8-watt LED – an improvement of only 38%, instead of the 78% improvement for the prior technology evolution. With this concept as the foundation, the following bar chart compares the ACEEE recommendations for a Missouri electric EERS to levels identified in the Ameren Missouri DSM Potential Study. While the two estimate relatively similar levels of load reduction potential through the year 2014, the two are on completely different trajectories after 2014.

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<sup>2</sup> [www.census.gov/prod/2010pubs/acsbr09-2.pdf](http://www.census.gov/prod/2010pubs/acsbr09-2.pdf)



2. ACEEE states that based upon several efficiency potential studies for Missouri and the Midwest, savings of 0.8% - 1% per year will be readily available over the next 10 years through proven programs, and that emerging technologies will continue to offer new opportunities for program savings that recent studies have not evaluated. The adoption of an energy efficiency standard with the assumption that some unknown, breakthrough technology will emerge is a risky strategy that could prove costly to Missouri residents as well as commercial and industrial entities operating in Missouri.
3. ACEEE states that leading states are already meeting 2% of their overall electricity needs. This does not accurately portray the facts. ACEEE's 2010 State Scorecard shows that only five states are meeting 1% or more load reductions.<sup>3</sup> Our understanding is that the 2010 scorecard is based on 2008 data where the majority of state DSM portfolio energy savings are derived from CFLs, which will not be sustainable going forward. In addition, there is some question as to whether state numbers in the ACEEE scorecard are reported on a net or gross basis, which could have meaningful downward impacts on the final numbers.
4. ACEEE states on page 14 that the Missouri Energy Efficiency Investment Act (MEEIA) sets a goal of achieving all cost effective electricity savings. The fact is that the words "all cost effective" appear one time in MEEIA and are obscured in a subparagraph of the bill. The actual goal of MEEIA is exactly what the law states: *"It shall be the policy of the state to value demand side investments equal to traditional investments in supply and delivery infrastructure and allow recovery of all reasonable and prudent costs of delivering cost effective demand side programs."*
5. ACEEE advocates for an energy efficiency resource standard without assessing the financial impacts to the residents of Missouri. While it is true that 26 states have EERS requirements, it is also true that most EERS states have other limits, such as rate caps, that act as safety valves. Those limits effectively preclude the standards from ever being met. Illinois is a good example. Illinois IOUs have steep, inclining savings mandates, but due to a 2% cumulative rate cap, their EE programs will peak at around 0.8% annual load reductions in 2012 and obtain less and less in each year thereafter.

Despite the concerns and issues that we have identified with the ACEEE draft report about both energy efficiency policy and methodologies used to develop policy, we agree that energy efficiency can be an important, cost effective resource in Missouri to meet a portion of Missouri's future energy needs.

<sup>3</sup> [www.aceee.org/sector/state-policy/scorecard](http://www.aceee.org/sector/state-policy/scorecard)

ACEEE has an opportunity in this report to discuss the current Missouri regulatory framework and make specific recommendations on the regulatory framework required to align utility incentives with investment in energy efficiency. Ameren Missouri and KCP&L have proven they are very capable of delivering energy efficiency resources at realistic levels. The missing piece is the regulatory framework that provides the business case for utilities to continue, which was the central goal of MEEIA.

Our Energy Efficiency teams are seeing the ACEEE report on Missouri's Energy Efficiency Potential for the first time. None of the members recall attending, participating in, or receiving any information from ACEEE regarding the three stakeholder meetings described in the report: (August 24, 2009 in Jefferson City, November 2, 2010 in Columbia, MO and March 29, 2011 in Columbia, MO). When the investor-owned electric service providers talked to discuss the draft report, Empire District Electric Co. could not provide comments, as they had not received the report. Consequently, we are concerned with the ACEEE policy recommendations and the methodologies used to support them. We would, however, like to work collaboratively with ACEEE to produce a credible Missouri-specific energy efficiency policy report that will help move investments in energy efficiency forward.

Finally, Ameren Missouri and Kansas City Power and Light have each attached a red line of the ACEEE draft report with a more complete list of each company's suggested revisions and comments. Please let us know if you would like to schedule a meeting or conference call to discuss our recommendations.

Sincerely,

A handwritten signature in black ink, appearing to read "Warren Wood".

Warren Wood, Vice President, Regulatory and Legislative Affairs, Ameren Missouri

A handwritten signature in black ink, appearing to read "Chuck Caisley".

Chuck Caisley, Vice President Marketing and Public Affairs, KCP&L