Exhibit No.:	
Issues:	Rate Design
Witness:	Laura Wolfe
Sponsoring Party:	Missouri Department of Natural Resources - Missouri Energy Center
Type of Exhibit:	Rebuttal Testimony
Case No.:	ER-2010-0036

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2010-0036

REBUTTAL TESTIMONY

OF

LAURA WOLFE

ON

BEHALF OF

MISSOURI DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENERGY

February 11, 2010

Q. Please state your name and business address.

A. My name is Laura Wolfe. My business address is Missouri Department of Natural Resources, Division of Energy, 1101 Riverside Drive, P.O. Box 176, Jefferson City, Missouri 65102-0176.

Q. Are you the same Laura Wolfe who filed Direct Testimony on behalf of the Missouri Department of Natural Resources, Division of Energy previously in this case?

A. Yes, I am.[1]

Q. On whose behalf are you testifying?

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

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

A. The purpose of my rebuttal testimony is to comment on AmerenUE's use of declining block per kilowatt-hours (kWh) charges for some of its customer classes as described by the Office of Public Counsel ("OPC") witness Mr. Ryan Kind.

Q. Please summarize what Mr. Kind stated about declining block rate designs.

A. Mr. Kind stated that "declining block charges are no longer an appropriate rate design for customers of Missouri regulated utility providers" because they "give customers an inappropriate price signal by charging lower per unit prices for higher levels of usage."[2] Mr. Kind also points out that declining block rates have an adverse impact on the effectiveness of energy efficiency investments and programs by extending the payback period of such investments and programs.

Q. Do you agree with Mr. Kind's assessment of declining block rate structures?

[1] On February 1, 2010, the Missouri Department of Natural Resources Energy Center was elevated to Division level within the Missouri Department of Natural Resources, and renamed the "Division of Energy".

A. I agree with Mr. Kind's assessment of the adverse impact of declining block rates on energy efficiency investments and programs. Declining block rate structures do elongate the payback period and that can adversely affect the willingness to invest in energy efficiency measures. In addition, declining block rates send a pricing signal that is contrary to encouraging energy efficiency. Higher blocks of usage priced lower than initial blocks of usage sends a signal to users that excess usage is not undesirable.

Q. Are there any national studies that address declining block rates?

A. Yes, there are. The National Action Plan for Energy Efficiency ("NAPEE") is a study that was sponsored by the United States Department of Energy and the United States Environmental Protection Agency. NAPEE is led by a Leadership Group of more than 60 leading gas and electric utilities, state agencies, energy consumers, energy service providers, and environmental/energy efficiency organizations.[3] The Leadership Group is identifying key barriers that limit greater U.S. investment in energy efficiency, as well as developing and documenting sound business practices for removing these barriers. In July, 2006, NAPEE released its first report. Five recommendations were detailed in that report, including a recommendation to:

> Modify policies to align utility incentives with delivery of cost-effective energy efficiency and modify rate making practices to promote energy efficiency investments including finding new rate designs that encourage energy efficiency.[4]

NAPEE stated in the report that "[r]ate design offers opportunities to encourage customers to invest in efficiency where they find it to be cost-effective, and to participate in new programs that bring them innovative technologies (e.g., smart meters) to help them control their energy

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[2] Kind, Direct – Rate Design, page 8.

[3] National Action Plan for Energy Efficiency, July 2006, page ES-10 through ES-11

[4] National Action Plan for Energy Efficiency Report, July 2006, page 1-10, http://www.epa.gov/cleanrgy/energy-programs/napee/resources/action-plan.html.

costs."[5] NAPEE further states that "[u]tility rates designed to promote sales or maximize stable revenues tend to lower the incentive for customers to adopt energy efficiency." For example, declining block rates reduce the savings that customers can attain from adopting energy efficiency. NAPEE recommends several rate design measures, including inclining block rates.

The recommendation to remove declining block rates has been reiterated twice by NAPEE. First, in its November 2008 report, National Action Plan for Energy Efficiency Vision for 2025: A Framework for Change:

> **Rates examined and modified considering impact on customer incentives to pursue energy efficiency.** Rate designs with clear and meaningful price signals to customers, coupled with increased information to customers through time- and usage-sensitive rates, can encourage energy efficiency from the consumer side. For example, removing "declining block" rate structures that discourage energy efficiency by decreasing costs as more electricity or natural gas is consumed may be an initial step.[6]

And again in its September 2009 report, Customer Incentives for Energy Efficiency Through Electric and Natural Gas Rate Design:

> Some rate designs, such as declining block rates and bill adders, send price signals that mask the true cost of incremental units of energy and thus can encourage more rather than less energy consumption.
>
> Rate designs that encourage energy usage should be examined. Alternatives such as inclining block rates offer greater customer incentives for energy efficiency. [7]

Q. What are inclining block rates?

A. Inclining block rates are the exact opposite of declining block rates. Inclining block rates have per-unit prices that increase for each successive block of energy consumed. Inclining

[5] National Action Plan for Energy Efficiency Report, July 2006, p. 5-14, , http://www.epa.gov/cleanrgy/energy-programs/napee/resources/action-plan.html

[6] National Action Plan for Energy Efficiency Vision for 2025: A Framework for Change, November 2008, page 2-12 though 2-13, http://www.epa.gov/cleanenergy/documents/vision.pdf.

[7] Customer Incentives for Energy Efficiency Through Electric and Natural Gas Rate Design, September, 2009. page 2, http://www.epa.gov/cleanenergy/documents/rate_design.pdf

block rates incent consumers to use less energy to keep their utility bills low. Higher rates for more units used can be easily understood, and the impact of reducing usage can be easily seen on monthly utility bills. The first units used are the least expensive making it easier for low-income consumers and small businesses to afford a basic level of needed energy, while encouraging higher users to use electricity more efficiently.

Q. Did Mr. Kind recommend inclining block rates?

A. No. Mr. Kind did state that OPC believes that declining block charges are no longer an appropriate rate design for customers of Missouri regulated utility providers. He also stated that when phasing out or eliminating declining block rate structure, rate impacts and gradualism should be considered.

Q. Do you agree with Mr. Kind?

A. Yes, I do. Inclining block rate structures are certainly desirable as incentives for customers to invest in energy efficiency measures. However, without an aggressive portfolio of energy efficiency programs in place, there are few mechanisms available to the customers to acquire those energy efficiency measures. Without energy efficiency programs in place, applying inclining rate structures creates a burden on consumers.

Q. What does MDNR recommend?

A. MDNR recommends that AmerenUE conduct a study addressing the elimination of declining block rates in its residential class in a revenue-neutral manner, and file the results of this study in its next general rate case.

Q. OPC witness Mr. Kind also mentioned that Public Counsel is supportive of rate structures that differentiate charges based on cost considerations. Does MDNR also support these kinds of rate structures?

A. Yes. Mr. Kind mentioned in particular time-of-use ("TOU") rates, real time pricing, usage curtailment rates (e.g. interruptible rates), and peak time rebates. All of these rates can increase the customers' sensitivity to price and lead them to make conscious decisions regarding energy use. NAPEE provided support for additional rate structures, too. For example, NAPEE recommended implementation of time-of-use ("TOU") rates. TOU rates may not result in an overall reduction in annual usage, but the price signals can encourage customers to consume less energy when energy is the most expensive to produce, procure, and deliver. TOU rates can be based on both, or either, time of the year or time of day.

Q. Does AmerenUE employ TOU rates?

A. AmerenUE does differentiate its energy charge in all of its services based on the time of year: summer months (June through September) versus winter months (October through May). Some services also have time of year sensitive demand charges. The energy charges and the demand charges are higher in all the services for the summer months, which could encourage energy efficient choices when electricity usage is typically at its peak.[8]

AmerenUE also offers TOU rates that are sensitive to time of day on a voluntary basis in all of its services. These optional TOU rates are based on off-peak hours versus on-peak hours. The energy charges for on-peak hours are significantly higher than the off-peak hours. Again, this type of rate structure can encourage customers to consume less energy when energy is the most expensive to produce, procure, and deliver.

Q. What does MDNR recommend?

A. MDNR recommends that AmerenUE explore the use of these various rate designs that will encourage energy efficiency, conservation, and increased awareness of cost to produce energy. And, as stated above, we recommend that AmerenUE conduct a study addressing the

elimination of declining block rates in its residential class in a revenue-neutral manner, and file the results of this study in its next general rate case.

Q. Does this conclude your testimony?

A. Yes. Thank you

[8] Union Electric Company (dba, AmerenUE) MO.P.S.C. Schedule No. 5, Sheets, 28, 32, 34, and 37.