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Issues:	Demand Side Management Rate Design
Witness:	Laura Wolfe
Sponsoring Party:	Missouri Department of Natural Resources – Division of Energy
Type of Exhibit:	Rebuttal Testimony
Case No.:	ER-2011-0028

REBUTTAL TESTIMONY

OF

LAURA WOLFE

MISSOURI DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENERGY

MARCH 25, 2011

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

UNION ELECTRIC COMPANY, d/b/a AMEREN MISSOURI

RATE CASE

CASE NO. ER-2011-0028

MDNR Exhibit No. 801
Date 4/26/11 Reporter JmB
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TABLE OF CONTENTS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Laura Wolfe. My business address is Missouri Department of Natural Resources ("MDNR"), 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 in this case?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony in this proceed?

A. The purpose of my rebuttal testimony is to address the following issues:

- the recommendations for cost recovery of Demand Side Management ("DSM") programs of Missouri Industrial Energy Consumers ("MEIC") witness Mr. Maurice Brubaker and Union Electric Company d/b/a Ameren Missouri's ("AmerenMO") witness Mr. William Davis,
- the Fixed Cost Recovery Mechanism proposed by AmerenMO witness Mr. William Davis,
- the recommendation from Staff witness Mr. John Rogers to leave the costs associated with the Lighting and Appliance Program in the regulatory asset account pending the completion of the evaluation of the program,
- the cost recovery recommendation of Mr. Brubaker for the Solar Rebates issued by AmerenMO, and
- the study performed by AmerenMO regarding the elimination of declining block rates.

First of all, however, I will clarify some statements from my Direct Testimony regarding AmerenMO's progress in implementing and administering its residential and business DSM programs.

II. CLARIFY STATEMENTS REGARDING DSM PROGRAM PROGRESS

Q. What do you wish to clarify regarding your statements made in Direct Testimony about AmerenMO's progress and implementation of its residential DSM programs?

A. I made the following statements regarding AmerenMO's residential DSM programs in my Direct Testimony:

> As detailed on page 1 of Schedule LAW-Direct-3, AmerenMO expended just over 60% of the 2008 budget proposed in the IRP for residential programs in 2008, but only achieved a little over 8% savings of MWh and less than 3% savings in MW. MDNR recognizes that all DSM programs take time and expense to design, implement and promote, and that in addition, AmerenMO had early difficulties with its residential program contractor. AmerenMO's efforts begin to be a bit more fruitful in 2009 when the MWh and MW savings rose to 67% and 31%, respectively. However, the efforts for 2010 were a decline from 2009: 54% savings in MWh and 27% savings in MW while spending 38% of the cumulative budget for the three year period.

I realized after filing that these statements are rather unclear. First of all, the use of 2008, 2009, and 2010, to label the progress inadvertently implies these are calendar year details. AmerenMO reports three *program* years: April 24, 2009 to September 30, 2009 is reflected as Year 1; October 1, 2009 to September 30, 2010 as Year 2; and, October 1, 2010 to September 30, 2011 will complete Year 3 for AmerenMO's residential DSM portfolio. Also, AmerenMO reports the progress of it DSM portfolio on a *cumulative* basis. Therefore, the progress I reported as the progress for 2008 (60% of the 2008 budget proposed in the Integrated Resource Plan ("IRP") for residential

programs, a little over 8% savings of MWh and less than 3% savings in MW) are for the five months of Year 1. The progress that I reported for 2009 (67% MWh and 31% MW) is actually the cumulative progress for the seventeen months of Year 1 and Year 2: April 24, 2009 through September 30, 2010. And, finally, the progress I reported for 2010 is actually the cumulative progress for the life of the programs through December 2010: all of Year 1 and Year 2 and the first three months of Year 3.

Schedule LAW-Rebuttal-1 clarifies AmerenMO's annual and cumulative progress with its residential DSM programs.

Q. With these clarifications, can you now provide annual MWh savings, MW savings, and expenditure information for the three program years for the residential programs? Please state these as percentage of actual to what was proposed in AmerenMO's 2008 IRP.

A. Yes, I can. The figures above for Year 1 (April 24, 2009 to Sept. 30, 2009) are obviously the annual amounts for that year. As for Year 2 (October 1, 2009 to September 30, 2010), AmerenMO achieved 107% of the proposed annual MWh savings, 51% of the proposed MW savings, and used 60% of the proposed budget. Year 3 will be from October 1, 2010 to Sept. 30, 2011. In the first three months of this program year, AmerenMO has achieved 45% of the proposed annual MWh savings, 25% of the proposed MW savings, and has used 23% of the proposed budget.

Q. What do you wish to clarify regarding your statements made in Direct Testimony regarding AmerenMO's progress and implementation of its business DSM programs?

A. I made the following statements regarding AmerenMO's business DSM programs in my Direct Testimony:

> AmerenMO achieved some success with its business energy efficiency programs. In 2008, the first budget year after the IRP plan, AmerenMO expended 28% of the proposed budget and achieved only a little more than 20% savings in MWh and 10% savings in MW. Again, just as with residential programs, the design, implementation, and promotion of DSM programs takes time and expense to ramp up to become fully operational. AmerenMO improved on its first year by increasing the MWh and MW savings to 57% and 20%, respectively, in 2009. However, as with the residential programs, the business energy programs experienced a decline in 2010 with only 49% savings in MWh, and 22% savings in MW while spending only 34% of the cumulative budget for the three year period.

Just as with AmerenMO's residential DSM programs, I realized after filing that these statements are rather unclear. As with its residential programs, AmerenMO reports three *program* years for its business DSM programs: Year 1 is slightly different than the residential since it starts on February 11, 2009 and runs through September 30, 2009; Year 2 and Year 3 are identical to the residential program years: October 1, 2009 through September 30, 2010 and Year 3 will be October 1, 2010 through September 30, 2011. Also like the residential DSM programs, AmerenMO reports progress on a cumulative basis; therefore my statements of progress in my direct testimony reflect AmerenMO's cumulative progress. The progress I reported for 2008 (28% of the 2008 budget proposed in the IRP for business programs, a little over 20% savings of MWh and 10% savings in MW) are for the eight months of Year 1. The progress I reported for 2009 (57% MWh and 20% MW) is actually the cumulative progress for the twenty months of Year 1 and Year 2: February 11, 2009 through September 30, 2010. And, finally, the progress I reported for 2010 is actually the cumulative progress for the life of the business programs through December 2010: all of Year 1 and Year 2 and the first three months of Year 3.

Schedule LAW-Rebuttal-1 clarifies AmerenMO's annual and cumulative progress with its business DSM programs.

Q. With these clarifications, can you now provide annual MWh savings, MW savings, and expenditure information for the three program years for the business programs? Please state these as percentage of actual to what was proposed in AmerenMO's 2008 IRP.

A. Yes, I can. The figures above for Year 1 (February 11, 2009 to Sept. 30, 2009) are obviously the annual amounts for that year. As for Year 2 (October 1, 2009 to September 30, 2010), AmerenMO achieved 93% of the proposed annual MWh savings, 100% of the proposed MW savings, and used 60% of the proposed budget. Year 3 will be from October 1, 2010 to Sept. 30, 2011. In just the first three months of that program year, AmerenMO has achieved 38% of the proposed annual MWh savings, 35% of the proposed MW savings, and has used 17% of the proposed budget.

Q. Do you prefer the Commission and the other parties of this case refer to Schedule LAW-Rebuttal-1 rather than the schedules you provided in your Direct Testimony?

A. Yes, I do. I ask that LAW-Rebuttal-1 be used in lieu of Schedule LAW-Direct 2 and Schedule LAW-Direct 3 accompanying my direct testimony.

Q. Do you have any recommendations regarding AmerenMO's DSM programs?

A. AmerenMO has done a commendable job of ramping up its DSM programs. It is achieving cost effective savings as projected by its 2008 IRP. MDNR recommends that AmerenMO continue to ramp up its DSM programs to pursue all cost effective DSM savings.

AmerenMO filed its 2011 IRP with the Commission on February 23, 2011.[1] Review of that IRP is still in the early stages; however, MDNR is concerned about AmerenMO's determination to curtail its investment in energy efficiency. This position is reflected in AmerenMO's choice of the low risk resource plan as its preferred resource plan. AmerenMO's low risk resource plan in the 2011 IRP includes costs for DSM for the next three years of $20.5 million and less annually.[2] The 2008 IRP preferred resource plan included DSM investments of nearly $40 million dollars for program Year 3.[3] This curtailment is also confirmed in statements appearing in recent press reports.[4]

AmerenMO has indicated two mechanisms in this rate case that would help AmerenMO continue its commitment to energy efficiency: (1) a more timely recovery of DSM program costs by shortening the amortization of the DSM regulatory asset account from six (6) years to three (3) years, and (2) a fixed cost recovery mechanism. AmerenMO witness Mr. Warner L. Baxter states in his direct testimony (emphasis added):

> As discussed during our last electric rate case, we must continue to make solid progress in the cost recovery mechanisms for energy efficiency programs to be consistent with the provisions of Senate Bill 376 and in order for utilities to continue to make meaningful investments in energy efficiency programs. As a result, we are seeking to make additional progress in the cost recovery framework for energy efficiency programs in this case. In particular, **AmerenUE is proposing to continue rate base treatment for energy efficiency expenditures and reduce their amortization from six years to three years**. In addition, **we are proposing to establish a tracking mechanism to account for the loss of recovery of fixed**

[1] Missouri Public Service Commission Case No. EO-2011-0271, *In the Matter of Union Electric Company's 2011 Utility Resource Filing Pursuant to 4 CSR 240 – Chapter 22.*
[2] Missouri Public Service Commission Case No. EO-2011-0271, *In the Matter of Union Electric Company's 2011 Utility Resource Filing Pursuant to 4 CSR 240 – Chapter 22*, Chapter 7, page 1.
[3] Refer to page 1 of LAW-Rebuttal-1: Total portfolio Year 3 budget.
[4] St. Louis Post Dispatch, "*Ameren cuts efficiency efforts to conserve bottom line*", by Jeffrey Tomich, February 25, 2011, http://www.stltoday.com/business/local/article_51367c2c-cf35-53e8-8b76-56163c706400.html

costs in our current rates that is attributable to our energy efficiency programs on a going-forward basis. While I expect that more progress will need to be made in this area in the future, **this framework will help place energy efficiency expenditures on a more equal footing with investment in additional generating facilities**, consistent with the provisions of Senate Bill 376, **and will allow us to sustain expenditures for energy efficiency programs that are consistent with our current planned levels of spending.**

This commitment was reiterated by Ameren witness Mr. William Davis in his direct testimony:

> As mentioned in the direct testimony of Mr. Baxter, for AmerenUE to continue spending at current levels on energy efficiency, the Company's financial incentives need to be more closely aligned with helping customers use energy more efficiently. Specifically I recommend that the Commission:
>
> • Continue rate base treatment of DSM related expenditures but reduce the amortization period from six to three years; and
>
> • Approve a fixed cost recovery mechanism that neutralizes the impact of the throughput incentive on the implementation of energy efficiency programs and services. The proposed mechanism will allow customers to keep all savings associated with variable costs that are reduced as a result of energy efficiency programs while also realizing the significant system benefits that result from energy efficiency programs.

I will discuss both of these recovery mechanisms in more detail in subsequent sections of this testimony. However, MDNR's position is that AmerenMO must commit to continued growth of its DSM programs, in terms of investment and savings, under the Missouri Energy Efficiency Investment Act ("MEEIA")[5] before the Commission considers the two ratemaking treatments stated above. Such a commitment is equally as important to the goal of energy efficiency as the ratemaking treatments requested by AmerenMO.

III. COST RECOVERY FOR DEMAND SIDE MANAGEMENT PROGRAMS

[5] Section 393.1124, RSMo.

Q. What is your concern for the recovery of DSM program costs recommended by MIEC witness Mr. Maurice Brubaker?

A. Timely cost recovery is cited in the *National Action Plan for Energy Efficiency Vision for 2025: A Framework for Change* published in November 2008 as an important incentive for utilities to aggressively pursue all cost-effective DSM.[6] Requiring utilities to recover the costs of providing cost-effective DSM programs over unreasonable lengths of time creates a disincentive for utilities to pursue all cost effective DSM. Mr. Brubaker proposes AmerenMO apply a ten year amortization to the recovery of the costs of DSM programs.[7] This creates a disincentive for AmerenMO to pursue all cost effective DSM savings. Mr. Brubaker asserts that:

> The idea of treating demand-side and supply-side resources comparably extends not only to allowing the utility to earn the same rate of return on the asset, but also extends to the recovery period. The costs of supply-side resources are recovered over their estimated useful life through a provision for depreciation. In the case of demand-side resources, the equivalent asset is a "regulatory asset," and the recovery is by means of an amortization. Thus, depreciation of supply-side resources and amortization of demand-side resources are equivalent concepts that accomplish the same purpose. Just as depreciation over the expected life of an asset is the norm for supply-side resources, amortization of the regulatory asset over the life of the related demand-side measure is the appropriate recovery period for demand-side resources.[8]

Depreciation is the recovery of the original cost over the estimated life of the fixed assets such as plant and equipment.[9] Amortization is similar to depreciation, but it is not as directly tied to an estimated life. Amortization is the accounting procedure that

[6] *National Action Plan for Energy Efficiency Vision for 2025: A Framework for Change*, November 2008, pages ES-3, 2-2, and 2-10, http://www.epa.gov/cleanenergy/documents/suca/vision.pdf
[7] [7] Brubaker Direct Revenue Requirement, page 14.
[8] Brubaker Direct Revenue Requirement, page 11.
[9] http://financial-dictionary.thefreedictionary.com/depreciation

gradually reduces the cost value of a limited life or intangible asset through periodic charges to income, [10] or as defined in the Uniform System of Accounts:

> 4. *Amortization* means the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized.[11]

Asset is defined as:

> an economic resource that is expected to provide benefits to a business. An asset has three vital characteristics: (1) future probable economic benefit; (2) control by the entity; and (3) results from a prior event or transaction.[12]

In more abbreviated terms from the Dictionary of Finance and Investment Terms, an asset is:

> anything having commercial or exchange value that is owned by a business, institution, or individual.[13]

Or, we can turn to the Dictionary of Business Terms, which defines an asset as:

> anything owned that has value; any interest in real property or personal property that can be used for payment of debts.[14]

Mr. Brubaker is equating supply side *resources* to supply side *assets* and asserting that demand side resources be treated the same as supply side *assets.* A very important first concept is that AmerenMO pays only a small portion of the cost to install energy efficiency measures, with customers paying the majority of the costs and owning the measures. The incentive costs associated with providing DSM measures to customers

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[10] http://financial-dictionary.thefreedictionary.com/amortization
[11] Electronic Code of Federal Regulations, Title 18: Conservation of Power and Water Resources, *Part 101 Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act,* http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=a1c36a909490a7f1508137221b50c2c6&rgn=div5&view=text&node=18:1.0.1.3.34&idno=18
[12] http://financial-dictionary.thefreedictionary.com/asset
[13] *Ibid.*
[14] *Ibid.*

do not acquire assets for the utility. AmerenMO can not control the use and maintenance of the DSM measure, the customer does. AmerenMO has no access to a commercial or exchange value for individual DSM measures, nor does AmerenMO have any interest in the real or personal property that results from a DSM measure. In short, AmerenMO does not own the DSM measures that are installed through DSM programs. While energy savings benefits continue for widely varying years, from an average of 2 years to an average of 28 years per Mr. Brubaker's own testimony,[15] the matching asset that provides those benefits is not owned by the utility and, therefore, is not an asset to the utility. The costs to provide DSM programs should not be subjected to the same treatment as supply side *assets*.

Supply side resources may include some resources that are not physical generating plant assets to the utility. Purchase power agreements are a good example. When utilities engage in a purchase power agreement with a generation provider, the cost of power purchased is expensed at the time it is purchased, and the annual capacity necessary to deliver that purchased power is expensed in 12 equal increments over the year of the purchase. The investments utilities make in DSM programs is more akin to the accounting for the power received in a purchase power agreement than to the purchase of a new generation facility.

Q. Currently, AmerenMO has an amortization period of six (6) years. AmerenMO witness Mr. Davis recommends reducing that to three (3) years. What is MDNR's position on shortening the amortization period?

[15] Bribaker, Direct Revenue Requirement, page 13.

A. Cost-effective demand side management economically reduces energy consumption. The State of Missouri has recognized the value of implementing cost effective DSM programs in MEEIA:

> 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. In support of this policy, the commission shall:
>
> (1) Provide timely cost recovery for utilities;
>
> (2) Ensure that utility financial incentives are aligned with helping customers use energy more efficiently and in a manner that sustains or enhances utility customers' incentives to use energy more efficiently; and
>
> (3) Provide timely earnings opportunities associated with cost-effective measurable and verifiable efficiency savings. [16]

Lengthy amortization of utility DSM costs provides a clear disincentive to utility investment in DSM contrary to MEEIA. Mr. Davis' recommendation to reduce the years of amortization from six (6) to three (3) may address the removal or reduction of the disincentive of untimely DSM cost recovery. AmerenMO is best suited to state if this shortened amortization period is sufficient to remove the disincentive to allow it to continue its progress in DSM programs. As stated in direct testimony, MDNR's position is that utilities achieving the goals of investing in all cost effective DSM should be allowed to expense program costs.[17]

IV. FIXED COST RECOVERY MECHANISM PROPOSED BY AMERENMO

Q. Do you support the Fixed Cost Recovery Mechanism proposed by AmerenMO witness Mr. William Davis?

[16] Section 393.1124, RSMo.
[17] Section 393.1124, RSMo.

A. No. Current rate structures for AmerenMO are designed to recover fixed costs through variable rates, and those variable rates are determined based on a usage amount that represents a single snap-shot in time, and successful DSM programs will have an impact on customer usage. While MDNR supports appropriate measures to reduce utility disincentives to invest in demand side programs, MDNR cannot recommend the Commission allow AmerenMO to implement the Fixed Cost Recovery Mechanism as proposed by Mr. Davis at this time without a commitment from AmerenMO to pursue all cost-effective DSM programs. As I stated above, AmerenMO has indicated that the Fixed Cost Recovery Mechanism ("FCRM") is one of two recovery mechanisms in this rate case that would help AmerenMO continue its commitment to energy. I also stated above that it is equally important to have a commitment from AmerenMO to continue the growth of their DSM programs in terms of investment and savings before the Commission allows the two recovery mechanisms, a three year amortization for program cost recovery and the FCRM, introduced by AmerenMO be implemented. As detailed earlier in this testimony, AmerenMO is not presenting such a commitment in its recently filed IRP. .

V. LIGHTING AND APPLIANCE REBATE AMORTIZATION

Q. Staff witness, Mr. John Rogers, has recommended to the Commission that the costs associated with the Lighting and Appliance Program remain in the regulatory asset account pending the evaluation of the program by AmerenMO. Mr. Rogers states that the evaluation of the program is necessary in order to

determine the prudency of the costs associated with the program. Do you agree with that recommendation?

A. No, I do not. The evaluation, measurement, and verification ("evaluation") of a DSM program seeks to demonstrate the value of energy efficiency programs by providing accurate, transparent and consistent assessments of methods and performance.[18] The amortization of DSM program costs from a regulatory asset account should not be delayed for the results of an evaluation of the DSM program. The evaluation will not determine if expenditures for the DSM program were prudent, or imprudent. An evaluation that determines that a program is not performing as anticipated is not proof of imprudent expenditures, but rather a lesson learned that could lead to program changes to improve the performance. Although not yet in effect, the Commission recognizes this distinction in proposed rule 4 CSR 240-3.163 Electric Utility Demand-Side Programs Investment Mechanisms Filing and Submission Requirements (emphasis added):

> (7) EM&V reports shall document, include analysis, and present any applicable recommendations for at least the following, and all models and spreadsheets shall be provided as executable versions in native format with all formulas intact:
>
> (A) Process evaluation and recommendations, if any; and
> (B) Impact evaluation—
> 1. The lifetime and annual gross and net demand savings and energy savings achieved under each program, and the techniques used to estimate annual demand savings and energy savings; and
> 2. A demonstration of the cost-effectiveness of the program, to include at a minimum the TRC of each program.
> A. If a program is determined not to be cost-effective, the electric utility shall identify the causes why and present

[18] American Council for an Energy-Efficient Economy, "Evaluation, Verification, and Measurement:, http://www.aceee.org/topics/emv

appropriate program modifications, if any, to make the program cost-effective.

If there are no modifications to make the program cost-effective, the utility shall describe how it intends to end the program and how it intends to achieve the energy and demand savings initially estimated for the discontinued program.

B. The fact that a program proves not to be cost-effective is not by itself sufficient grounds for disallowing cost recovery.[19]

With all new programs, utilities use the best information that is available to project the cost effectiveness of a program. Programs that are projected to be cost effective are then implemented and administered. AmerenMO designed this program and duly submitted a proposed tariff filing to implement the program, which was approved by the Commission. Staff has presented no evidence that AmerenMO mismanaged the Lighting and Appliance program in any way that would result in imprudent expenditures. An evaluation of the Lighting and Appliance program will not provide the Staff evidence that AmerenMO has or has not mismanaged this Commission-approved program and has or has not imprudently incurred expenditures in this program.

AmerenMO is reporting excellent results from this program. As can be seen on page 2 of Schedule LAW-Rebuttal-1, AmerenMO is reporting that this program has successfully produced savings in MWh (66,108 MWh saved in program Year 2 compared to the projected 37,179 MWh); savings in MW (6.1 MW saved in Year 2 compared to 3.2 MW projected; and, AmerenMO used 113% of the projected budget

[19] Missouri Public Service Commission, Case No. EX-2010-0368, *Rulemaking Transmittal*, October 4, 2010.

for this program for Year 2. There are no indications that AmerenMO has imprudently expended funds on this program. MDNR recommends that the costs of implementing the Lighting and Appliance program that are reflected in AmerenMO's regulatory asset account be recovered in rates in whatever cost recovery mechanism is approved by the Commission in this rate case.

VI. COST RECOVERY RECOMMENDATION FOR SOLAR REBATES

Q. MIEC witness Mr. Brubaker recommended to the Commission that AmerenMO's cost of providing rebates for solar equipment installations by customers be recovered over a ten year amortization. Do you agree?

A. No. For the very same reasons that I expressed in response to Mr. Brubaker's recommendation to amortize DSM program costs over 10 years, the costs associated with providing solar rebates should be expensed and recovered in the year in which they occurred or over a very short amortization period. AmerenMO implemented this program in order to comply with Proposition C which was passed by Missouri voters November 11, 2008.[20] This is a mandatory program that requires AmerenMO to offer these rebates. AmerenMO should not be required to carry the costs of these rebates any longer than one year.

VII. DECLINING BLOCK RATES

[20] *Amendment to Chapter 393 of the Revised Statutes of Missouri, Relating to Renewable Energy, version 4, 2008-031;* http://www.sos.mo.gov/elections/2008petitions/2008-031.asp

Q. The First Nonunanimous Stipulation and Agreement in AmerenMO's recent rate case, Case No. ER-2010-0036, states the following: "prior to its next general rate case, the Company shall conduct a study addressing the elimination of declining block rates for residential service in a revenue neutral manner, and will file the results of this study in its next general electric rate case." Did AmerenMO provide the results of such a study?

A. Yes. AmerenMO witness Mr. Wilbon Cooper stated in his direct testimony that AmerenMO conducted an analysis of the winter billing for residential electric space heating. Mr. Cooper stated:

> This group of approximately 217,000 residential customers was chosen as their higher than average winter usage is more likely to be negatively impacted by a revenue neutral elimination of the declining block rate.

Q. Will these customers be negatively impacted by a revenue neutral elimination of the declining block rate?

A. Some customers will be. The purpose of removing declining block rates is to encourage energy efficiency and conservation. Declining block rates do not send a signal to encourage reduced usage. It is inevitable that some customers, higher usage customers, will see an increase in bills, but this increase is offset by decreases for the first block of billing units, kWhs. Lower usage customers may actually see a decrease in monthly bills.

Accompanying this testimony is Schedule LAW-Rebuttal-2. This is an analysis of removing the declining block rate for the winter energy charge for residential customers. This analysis calculates a flat rate that could generate the same revenue for the same number of units sold in the winter months between April 2009 and March

2010 as the current two rates generate. Currently, AmerenMO's winter energy charge for residential customers is 6.78¢ for each of the first 750 kWh for each customer each month, a 4.61¢ for each kWh over 750 kWhs that same month. A flat rate that would generate the same revenue for the same number of kWhs is 5.47¢ per kWh.

On the second page of Schedule LAW-Rebuttal-2 the impact of this change to the structure of the winter energy charge is detailed for monthly usage amounts of: 750 kWhs; 1,000 kWhs; 1500 kWhs; 2,000 kWhs; 4,000 kWhs; 6,000 kWhs; 10,000 kWhs; and 15,000 kWhs. The percentage changes detailed in this analysis are for a customer's total monthly bill. With the current rates, the lower usage bills (750 kWhs to 1,500 kWhs) would see decreases ranging from $9.83 to $3.39 (17% of the bill to 4% of the bill). Monthly bills for usage starting somewhere between 1,500 kWhs to 2,000 kWhs would start to see slight increases ($0.90, 1% of the bill) that grow to $112.55, a 16% increase for a bill for 15,000 kWhs.

The same analysis is reflected on page 2 of Schedule LAW-Rebuttal-2 using rates proposed by AmerenMO in this rate case. The results are not markedly different. With the proposed rates and an equivalent flat rate energy charge, lower usage bills (750 kWhs to 1,500 kWhs) would see decreases ranging from $11.37 to $3.92 (16% of the bill to 3% of the bill). Bills for usage starting somewhere between 1,500 kWhs to 2,000 kWhs would start to see slight increases ($1.04, 1% of the bill) that grow to $130.18, a 15% increase, for customers using 15,000 kWhs in a month.

Q. Is this how Mr. Cooper calculated the impact of a removing the declining block rates from the residential winter energy charge?

A. No. Mr. Cooper provided a copy of AmerenMO's analysis in response to MDNR's Data Request DNR 006. In the analysis, the flat winter energy charge that is used is 6.33¢ per kWh. However, it is not clear to me how this amount was determined to be a rate that would have a revenue neutral impact if used rather than a declining block rate. In AmerenMO's analysis, the 6.33¢ per kWh flat winter energy charge will generate revenues of $195,797,854 when used with the proposed per-month customer and low income pilot program charge. However, AmerenMO's analysis indicates that the use of all of the rates, including the proposed declining block winter energy charge, proposed by AmerenMO in this rate case would generate revenues of $185,158,038. This is not a revenue-neutral analysis.

Q. What is your recommendation to the Commission regarding declining block rates?

A. I recommend that the Commission direct AmerenMO to remove declining block rates in the revenue neutral fashion I demonstrated.

VII. TAUM SAUK COST RECOVERY

Q. In the Staff's report on revenue requirement and cost of service, Staff witness Ms. Lisa Hanneken addressed adjustments to the costs associated with the rebuilding of the Taum Sauk reservoir that are included in the revenue requirement.[21] Office of Public Counsel witness Mr. Ryan Kind also addressed adjustments to the costs included in the cost of service for the Taum Sauk reservoir rebuild.[22] Does MDNR have a position on the determination of what costs, if any, from the

[21] Missouri Public Service Commission Staff Report – Revenue Requirement – Cost of Service, page 102.
[22] Kind, Direct

rebuilding of the Taum Sauk reservoir should be included in the revenue requirement for AmerenMO in this case?

A. MDNR has no position on the determination of what costs, if any, from the rebuilding of the Taum Sauk reservoir should be included in the revenue requirement for AmerenMO in this case. The consent agreement referenced in my direct testimony, states[23]:

> AmerenUE ... further acknowledges the audit powers of the Missouri Public Service Commission to ensure that no such recovery is pursued.[24]

MDNR, too, acknowledges the audit powers of the Commission and will defer to the Commission to determine eligible costs that may be recovered from ratepayers

Q. Does this conclude your testimony?

A. Yes.

[23] Wolfe Direct, page 12.

[24] *State of Missouri ex rel. Jeremiah W. (Jay) Nixon v. Union Electric d/b/a AmerenUE.* Case No. 07RE-CC00005, Reynolds County Circuit Court, January 9, 2008.

Missouri PSC Case No. ER-2011-0028
Anticipated MWh Savings, MW Savings, TRC Results, and Utility Cost Test Results

Source:
Missouri PSC Case No. EO-2007-0409: ***In the Matter of Union Electric Company d/b/a AmerenUE's 2008 Utility Resource Filing pursuant 4 CSR 240 – Chapter 23***
4 CSR 240-22.070 Appendix B - DSM Implementation Plan, Table 8: AmerenUE Portfolio Summary, page 31

	Total Annual MWh			Total Annual MW			Annual Program Costs (x $1,000)			Cost-Effectiveness	
Residential Program	**Year 1**	**Year 2**	**Year 3**	**Year 1**	**Year 2**	**Year 3**	**Year 1**	**Year 2**	**Year 3**	**TRC**	**UCT**
ENERGY STAR Homes Program	-	-	154	-	-	0.1		$ 129	$ 175	1.00	1.18
Home Energy Performance	3,480	4,715	6,268	0.5	0.7	0.8	$ 762	$ 1,058	$ 1,442	2.39	3.19
Residential DR-CPP w/ Smart Thermostat	-	-	159	-	-	1.8			$ 506	1.37	1.30
Residential DR-Direct Load Control	495	518	541	5.5	5.8	6.0	$ 1,144	$ 1,314	$ 1,497	1.93	1.78
Residential HVAC Diagnostics & Tune-Up	-	7,368	9,718	-	1.5	2.0	$ 520	$ 2,755	$ 3,998	1.55	1.92
Residential Lighting and Appliances	28,749	37,179	46,742	2.4	3.2	4.0	$ 3,075	$ 4,076	$ 5,252	2.29	3.99
Residential Low Income	4,581	4,581	4,580	0.3	0.2	0.3	$ 2,954	$ 3,028	$ 3,104	0.88	1.00
Residential Multifamily	10,012	14,124	9,890	1.8	2.5	1.9	$ 656	$ 1,029	$ 1,362	2.63	3.26
Residential New HVAC				-			$ -			1.71	2.13
Total Residential Program	47,317	68,485	78,052	10.5	13.9	16.9	$ 9,111	$ 13,389	$ 17,336		

$ 6,147

	Total Annual MWh			Total Annual MW			Annual Program Costs (x $1,000)			Cost-Effectiveness	
Business Program	**Year 1**	**Year 2**	**Year 3**	**Year 1**	**Year 2**	**Year 3**	**Year 1**	**Year 2**	**Year 3**	**TRC**	**UCT**
C&I Custom	27,099	27,099	27,099	3.5	3.5	3.6	$ 4,203	$ 4,308	$ 4,415	2.23	2.94
C&I Prescriptive	32,470	36,515	40,753	4.8	5.7	6.1	$ 4,871	$ 6,457	$ 8,320	1.89	2.44
C&I Retro-commissioning	11,573	12,434	13,350	1.4	1.4	1.6	$ 562	$ 619	$ 681	3.17	6.78
Commercial Demand Credit	760	-	-	38.0	-	-	$ 410	$ 420	$ 431	1.56	1.08
Commercial DR-CPP w/Smart Thermostat	-	-	178	-	-	2.0			$ 488	1.60	1.51
Commercial New Construction	817	817	817	0.3	0.2	0.3	$ 666	$ 682	$ 699	1.14	1.35
Industrial Interruptible	3,800	-	-	47.5	-	-	$ 1,999	$ 2,048	$ 2,100	1.59	0.36
Total Commercial/Industrial Program	76,519	76,865	82,197	95.5	10.8	13.6	$ 12,711	$ 14,534	$ 17,134		

	Total Annual MWh			Total Annual MW			Annual Program Costs (x $1,000)			Cost-Effectiveness	
Other Programs and Costs	**Year 1**	**Year 2**	**Year 3**	**Year 1**	**Year 2**	**Year 3**	**Year 1**	**Year 2**	**Year 3**	**TRC**	**UCT**
Education Program	-	-	-	-	-	-	$ 500	$ 700	$ 900		
Evaluation, Measurement, and Verification	-	-	-	-	-	-	$ 1,100	$ 1,400	$ 1,700		
Information Program	-	-	-	-	-	-	$ 500	$ 700	$ 900		
Portfolio Administration	-	-	-	-	-	-	$ 1,100	$ 1,400	$ 1,700		
Total Other Programs and Costs	-	-	-	-	-	-	$ 3,200	$ 4,200	$ 5,200		

	Total Annual MWh			Total Annual MW			Annual Program Costs (x $1,000)			Cost-Effectiveness	
	Year 1	**Year 2**	**Year 3**	**Year 1**	**Year 2**	**Year 3**	**Year 1**	**Year 2**	**Year 3**	**TRC**	**UCT**
Total Portfolio	123,836	145,350	160,249	106.0	25.7	30.5	$ 25,022	$ 32,123	$ 39,670	1.71	2.04

Year 1:
RESIDENTIAL: Apr. 24, 2009 to Sept. 30, 2009
BUSINESS: Feb. 11, 2009 to Sept. 30, 2009
Year 2:
Oct. 1, 2009 to Sept. 30, 2010
Year 3:
Oct. 1, 2010 to Sept. 30, 2011

Missouri PSC Case No. ER-2011-0028
Comparison of Actual to Anticipated MWh Savings, MW Savings, and Program Costs - Residential Programs
Source: Missouri PSC Case No. EO-2007-0409: In the Matter of Union Electric Company
d/b/a AmerenUE's 2008 Utility Resource Filing pursuant 4 CSR 240 – Chapter 23
4 CSR 240-22.070 Appendix B - DSM Implementation Plan, Table 8: AmerenUE Portfolio Summary, page 31
and Response to Data Request DNR-004

	Total Annual MWh											
	Year 1			Year 2			Year 3			Cumulative		
Residential Program	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance
ENERGY STAR Homes Program	-	-	-	-	-	-	154	-	(154)	154	-	(154)
Home Energy Performance	3,480	-	(3,480)	4,715	-	(4,715)	6,268	-	(6,268)	14,463	-	(14,463)
Residential DR-CPP w/ Smart Thermostat	-	-	-	-	-	-	159	-	(159)	159	-	(159)
Residential DR-Direct Load Control	495	-	(495)	518	-	(518)	541	-	(541)	1,554	-	(1,554)
Residential HVAC Diagnostics & Tune-Up	-	-	-	7,368	1,036	(6,332)	9,718	4,470	(5,248)	17,086	5,506	(11,580)
Residential Lighting and Appliances	28,749	3,838	(24,911)	37,179	66,108	28,929	46,742	22,731	(24,011)	112,670	92,677	(19,993)
Residential Low Income	4,581	-	(4,581)	4,581	5,201	620	4,580	3,339	(1,241)	13,742	8,540	(5,202)
Residential Multifamily	10,012	-	(10,012)	14,124	29	(14,095)	9,890	-	(9,890)	34,026	29	(33,997)
Residential New HVAC (*Combined with HVAC Diag. & Tune-up*)	-								-	-	-	-
Appliance Recycling (Not in IRP plan. TRC: 1.71; UCT: 2.13)					908	908	-	4,704	4,704	-	5,612	5,612
Total Residential Program	47,317	3,838	(43,479)	68,485	73,282	4,797	78,052	35,244	(42,808)	193,854	112,364	(81,490)
Percentage Actual to IRP Plan		8.11%			107.00%			45.15%			57.96%	

	Total Annual MW											
	Year 1			Year 2			Year 3			Cumulative		
Residential Program	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance
ENERGY STAR Homes Program	-	-	-	-	-	-	0.1	-	(0.1)	0.1	-	(0.1)
Home Energy Performance	0.5	-	(0.5)	0.7	-	(0.7)	0.8	-	(0.8)	2.0	-	(2.0)
Residential DR-CPP w/ Smart Thermostat	-	-	-	-	-	-	1.8	-	(1.8)	1.8	-	(1.8)
Residential DR-Direct Load Control	5.5	-	(5.5)	5.8	-	(5.8)	6.0	-	(6.0)	17.3	-	(17.3)
Residential HVAC Diagnostics & Tune-Up	-	-	-	1.5	0.3	(1.2)	2.0	1.3	(0.7)	3.5	1.6	(1.9)
Residential Lighting and Appliances	2.4	0.3	(2.1)	3.2	6.1	2.9	4.0	2.0	(2.0)	9.6	8.4	(1.2)
Residential Low Income	0.3	-	(0.3)	0.2	0.6	0.4	0.3	0.4	0.1	0.8	1.0	0.2
Residential Multifamily	1.8	-	(1.8)	2.5	-	(2.5)	1.9	-	(1.9)	6.2	-	(6.2)
Residential New HVAC (*Combined with HVAC Diag. & Tune-up*)								-	-	-	-	-
Appliance Recycling (Not in IRP plan. TRC: 1.71; UCT: 2.13)					0.1	0.1		0.6	0.6	-	0.7	0.7
Total Residential Programs	10.5	0.3	(10.2)	13.9	7.1	(6.9)	16.9	4.3	(13.2)	41.3	11.7	(29.6)
Percentage Actual to IRP Plan		2.86%			51.08%			25.44%			28.33%	

	Annual Program Costs (x $1,000)											
	Year 1			Year 2			Year 3					
	2008			2009			2010			Cumulative		
Residential Program	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance
ENERGY STAR Homes Program	$ -		$ -	$ 129		$ (129)	$ 175		$ (175)	$ 304	$ -	$ (304)
Home Energy Performance	$ 762	$ 371	$ (391)	$ 1,058		$ (1,058)	$ 1,442		$ (1,442)	$ 3,262	$ 371	$ (2,891)
Residential DR-CPP w/ Smart Thermostat	$ -	$ 300	$ 300	$ -		$ -	$ 506		$ (506)	$ 506	$ 300	$ (206)
Residential DR-Direct Load Control	$ 1,144		$ (1,144)	$ 1,314		$ (1,314)	$ 1,497		$ (1,497)	$ 3,955	$ -	$ (3,955)
Residential HVAC Diagnostics & Tune-Up	$ 520	$ 622	$ 102	$ 2,755	$ 278	$ (2,477)	$ 3,998	$ 854	$ (3,144)	$ 7,273	$ 1,754	$ (5,519)
Residential Lighting and Appliances	$ 3,075	$ 2,424	$ (651)	$ 4,076	$ 4,620	$ 544	$ 5,252	$ 1,598	$ (3,654)	$ 12,403	$ 8,642	$ (3,761)
Residential Low Income	$ 2,954	$ 1,169	$ (1,785)	$ 3,028	$ 2,641	$ (387)	$ 3,104	$ 1,210	$ (1,894)	$ 9,086	$ 5,020	$ (4,066)
Residential Multifamily	$ 656	$ 860	$ 204	$ 1,029	$ 380	$ (649)	$ 1,362		$ (1,362)	$ 3,047	$ 1,240	$ (1,807)
Residential New HVAC (*Combined with HVAC Diag. & Tune-up*)									$ -	$ -	$ -	$ -
Appliance Recycling (Not in IRP plan. TRC: 1.71; UCT: 2.13)				$ -	$ 58	$ 58	$ -	$ 382	$ 382	$ -	$ 440	$ 440
Total Residential Program	$ 9,111	$ 5,746	$ (3,365)	$ 13,389	$ 7,977	$ (5,470)	$ 17,336	$ 4,044	$ (13,292)	$ 39,836	$ 17,767	$ (22,069)
Percentage Actual to IRP Plan		63.07%			59.58%			23.33%			44.60%	

Missouri PSC Case No. ER-2011-0028
Comparison of Actual to Anticipated MWh Savings, MW Savings, and Program Costs - Business Programs
Source: Missouri PSC Case No. EO-2007-0409: In the Matter of Union Electric Company
d/b/a AmerenUE's 2008 Utility Resource Filing pursuant 4 CSR 240 – Chapter 23
4 CSR 240-22.070 Appendix B - DSM Implementation Plan, Table 8: AmerenUE Portfolio Summary, page 31
and Response to Data Request DNR-004

Total Annual MWh

	Year 1			Year 2			Year 3			Cumulative		
Business Program	**IRP Plan**	**Actual**	**Variance**	**IRP Plan**	**Actual**	**Variance**	**IRP Plan**	**Actual**	**Variance**	**IRP Plan**	**Actual**	**Variance**
C&I Custom	27,099	5,018	(22,081)	27,099	52,347	25,248	27,099	18,661	(8,438)	81,297	76,026	(5,271)
C&I Prescriptive	32,470	10,466	(22,004)	36,515	12,893	(23,622)	40,753	7,724	(33,029)	109,738	31,083	(78,655)
C&I Retro-commissioning	11,573	-	(11,573)	12,434	1,558	(10,876)	13,350	2,023	(11,327)	37,357	3,581	(33,776)
Commercial Demand Credit	760	156	(604)	-	-	-	-	-	-	760	156	(604)
Commercial DR-CPP w/Smart Thermostat	-	-	-	-	-	-	178	-	(178)	178	-	(178)
Commercial New Construction	817	-	(817)	817	4,809	3,992	817	2,690	1,873	2,451	7,499	5,048
Industrial Interruptible	3,800	-	(3,800)	-	-	-	-	-	-	3,800	-	(3,800)
Total C/I Program	76,519	15,640	(60,879)	76,865	71,607	(5,258)	82,197	31,098	(51,099)	235,581	118,345	(117,236)
Percentage Actual to IRP Plan		20.44%			93.16%			37.83%			50.24%	

Total Annual MW

	Year 1			Year 2			Year 3			Cumulative		
Business Program	**IRP Plan**	**Actual**	**Variance**	**IRP Plan**	**Actual**	**Variance**	**IRP Plan**	**Actual**	**Variance**	**IRP Plan**	**Actual**	**Variance**
C&I Custom	3.5	1.0	(2.5)	3.5	7.8	4.3	3.6	2.5	(1.1)	10.6	11.3	0.7
C&I Prescriptive	4.8	1.9	(2.9)	5.7	2.1	(3.6)	6.1	1.2	(4.9)	16.6	5.2	(11.4)
C&I Retro-commissioning	1.4	-	(1.4)	1.4	0.2	(1.2)	1.6	0.3	(1.3)	4.4	0.5	(3.9)
Commercial Demand Credit	38.0	7.5	(30.5)	-	-	-	-	-	-	38.0	7.5	(30.5)
Commercial DR-CPP w/Smart Thermostat	-	-	-	-	-	-	2.0	-	(2.0)	2.0	-	(2.0)
Commercial New Construction	0.3	-	(0.3)	0.2	0.7	0.5	0.3	0.7	0.4	0.8	1.4	0.6
Industrial Interruptible	47.5	-	(47.5)	-	-	-	-	-	-	47.5	-	(47.5)
Total C/I Program	95.5	10.4	(85.1)	10.8	10.8	(0.0)	13.6	4.7	(8.9)	119.9	25.9	(94.0)
Percentage Actual to IRP Plan		10.89%			100.00%			34.56%			21.60%	

Annual Program Costs (x $1,000)

	Year 1			Year 2			Year 3			Cumulative		
Business Program	**IRP Plan**	**Actual**	**Variance**	**IRP Plan**	**Actual**	**Variance**	**IRP Plan**	**Actual**	**Variance**	**IRP Plan**	**Actual**	**Variance**
C&I Custom	$ 4,203	$ 1,882	$ (2,321)	$ 4,308	$ 6,277	$ 1,969	$ 4,415	$ 1,410	$ (3,005)	$ 12,926	$ 9,569	$ (3,357)
C&I Prescriptive	$ 4,871	$ 1,524	$ (3,347)	$ 6,457	$ 1,483	$ (4,974)	$ 8,320	$ 678	$ (7,642)	$ 19,648	$ 3,685	$ (15,963)
C&I Retro-commissioning	$ 562	$ 74	$ (488)	$ 619	$ 240	$ (379)	$ 681	$ 318	$ (363)	$ 1,862	$ 632	$ (1,230)
Commercial Demand Credit	$ 410	$ 40	$ (370)	$ 420		$ (420)	$ 431		$ (431)	$ 1,261	$ 40	$ (1,221)
Commercial DR-CPP w/Smart Thermostat	$ -		$ -	$ -		$ -	$ 488		$ (488)	$ 488	$ -	$ (488)
Commercial New Construction	$ 666	$ 95	$ (571)	$ 682	$ 747	$ 65	$ 699	$ 433	$ (266)	$ 2,047	$ 1,275	$ (772)
Industrial Interruptible	$ 1,999		$ (1,999)	$ 2,048		$ (2,048)	$ 2,100		$ (2,100)	$ 6,147	$ -	$ (6,147)
Total Business Programs	$ 12,711	$ 3,615	$ (9,096)	$ 14,534	$ 8,747	$ (5,787)	$ 17,134	$ 2,839	$ (14,295)	$ 44,379	$ 15,201	$ (29,178)
Percentage Actual to IRP Plan		28.44%			60.18%			16.57%			34.25%	

Year 1:
Feb: 11, 2009 to Sept. 30, 2009
Year 2:
Oct. 1, 2009 to Sept. 30, 2010
Year 3:
Oct. 1, 2010 to Sept. 30, 2011

Missouri PSC Case No. ER-2011-0028
Comparison of Actual to Anticipated MWh Savings, MW Savings, and Program Costs
Source: Missouri PSC Case No. EO-2007-0409: In the Matter of Union Electric Company
d/b/a AmerenUE's 2008 Utility Resource Filing pursuant 4 CSR 240 – Chapter 23
4 CSR 240-22.070 Appendix B - DSM Implementation Plan, Table 8: AmerenUE Portfolio Summary, page 31
and Response to Data Request DNR-004

Total Annual MWh	Year 1			Year 2			Year 3		
	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance
Residential Portfolio									
Annual	47,317	3,838	(43,479)	68,485	73,282	4,797	78,052	35,244	(42,808)
Cumulative				*115,802*	*77,120*	*(38,682)*	*193,854*	*112,364*	*(81,490)*
% Used - Annual		8%			107%			45%	
% Used - Cumulative					*67%*			*58%*	

Total Annual MW	Year 1			Year 2			Year 3		
	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance
Residential Portfolio									
Annual	10.60	0.30	(10.20)	13.90	7.10	(6.80)	16.90	4.30	(12.60)
Cumulative				*24.40*	*7.40*	*(17.00)*	*41.30*	*11.70*	*(29.60)*
% Used - Annual		3%			51%			25%	
% Used - Cumulative					*30%*			*28%*	

Annual Program Costs (x $1,000)	Year 1			Year 2			Year 3		
			Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance
Residential Portfolio									
Annual	$ 9,111	$ 5,746	$ (3,365)	$ 13,389	$ 7,977	$ (5,412)	$ 17,336	$ 4,044	$ (13,292)
Cumulative				*$ 22,500*	*$ 13,723*	*$ (8,777)*	*$ 39,836*	*$ 17,767*	*$ (22,069)*
% Used - Annual		63%			60%			23%	
% Used - Cumulative					*61%*			*45%*	

Total Annual MWh	Year 1			Year 2			Year 3		
	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance
Business Portfolio									
Annual	76,519	15,640	(60,879)	76,885	71,607	(5,258)	82,197	31,098	(51,099)
Cumulative				*153,384*	*87,247*	*(66,137)*	*235,581*	*118,345*	*(117,236)*
% Used - Annual		20%			93%			38%	
% Used - Cumulative					*57%*			*50%*	

Total Annual MW	Year 1			Year 2			Year 3		
	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance
Business Portfolio									
Annual	95.50	10.40	(85.10)	10.80	10.80	-	13.60	4.70	(8.90)
Cumulative				*106.30*	*21.20*	*(85.10)*	*119.90*	*25.90*	*(94.00)*
% Used - Annual		11%			100%			35%	
% Used - Cumulative					*20%*			*22%*	

Annual Program Costs (x $1,000)	Year 1			Year 2			Year 3		
			Variance	IRP Plan	Actual	Variance	IRP Plan	Actual	Variance
Business Portfolio									
Annual	$ 12,711	$ 3,615	$ (9,096)	$ 14,534	$ 8,747	$ (5,787)	$ 17,134	$ 2,839	$ (14,295)
Cumulative				*$ 27,245*	*$ 12,362*	*$ (14,883)*	*$ 44,379*	*$ 15,201*	*$ (29,178)*
% Used - Annual		28%			60%			17%	
% Used - Cumulative					*45%*			*34%*	

34,470

Year 1:
Apr. 24, 2009 to Sept. 30, 2009
Year 2:
Oct. 1, 2009 to Sept. 30, 2010
Year 3:
Oct. 1, 2010 to Sept. 30, 2011

ER-2010-0028 Ameren Missouri Rate Case
Residential Winter Energy Charge
Elimination of Declining Block Rate
Winter Rate - Applicable during 8 monthly billing periods of October through May

Winter kWh Usage (Billing Determinents)
Per Ameren MO Response to Data Request DNR 006

Month	Customer Count	Monthly kWhr	First 750 kWh	Over 750 kWh
April-09	195,648	250,248,340	126,610,470	123,637,870
May-09	214,015	213,337,676	130,980,204	82,357,472
October-09	213,526	197,985,651	129,303,725	68,681,926
November-09	213,427	233,621,032	133,352,667	100,268,365
December-09	213,819	357,753,235	144,311,103	213,442,132
January-10	214,216	613,152,614	153,401,294	459,751,320
February-10	214,086	523,091,311	151,683,132	371,408,179
March-10	213,781	435,800,643	148,387,409	287,413,234
Winter Total		**2,824,990,502**	**1,118,030,004**	**1,706,960,498**

Residential Winter Energy Charge Revenue

	Current Rate	Winter kWr	Current Winter Revenue	Proposed Rate	Winter kWr	Proposed Winter Revenue
First 750 kWh	$ 0.0678	1,118,030,004	75,802,434	$ 0.0747	1,118,030,004	83,516,841
Over 750 kWh	$ 0.0461	1,706,960,498	78,690,879	$ 0.0496	1,706,960,498	84,665,241
Winter Total		**2,824,990,502**	**154,493,313**		**2,824,990,502**	**168,182,082**

Equivalent Flat Rate Winter Energy Charge

Current Winter Revenue	Winter kWr	Equivalent Flat Rate for Current Revenue
154,493,313	2,824,990,502	**$ 0.0547**

Porposed Winter Revenue	Winter kWr	Equivalent Flat Rate for Proposed Revenue
168,182,082	2,824,990,502	**$ 0.0595**

ER-2010-0026 Ameren Missouri Rate Case
Elimination of Declining Block Rate: Residential Winter Energy Charge
Winter Rate - Applicable during 8 monthly billing periods of October through May

Impact on Winter Energy Charge Billed

	Current Rate	Flat Rate Equivalent	Billed kWh 750.00 Bill at Current Rate	Billed kWh 750.00 Bill at Flat Rate Equivalent	Billed kWh 1,000.00 Bill at Current Rate	Billed kWh 1,000.00 Bill at Flat Rate Equivalent	Billed kWh 1,500.00 Bill at Current Rate	Billed kWh 1,500.00 Bill at Flat Rate Equivalent	Billed kWh 2,000.00 Bill at Current Rate	Billed kWh 2,000.00 Bill at Flat Rate Equivalent
Customer Charge per month	8.0000		$ 8.00	$ 8.00	$ 8.00	$ 8.00	$ 8.00	$ 8.00	$ 8.00	$ 8.00
Low-Income Pilot Program Charge – per month	0.0300		$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03
Energy Charge		0.0547		$ 41.02		$ 54.69		$ 82.03		$ 109.38
First 750 kWh	0.0678		$ 50.85		$ 50.85		$ 50.85		$ 50.85	
Over 750 kWh	0.0461		$ -		$ 11.53		$ 34.58		$ 57.63	
Total Bill			$ 58.88	$ 49.05	$ 70.41	$ 62.72	$ 93.46	$ 90.08	$ 116.51	$ 117.41
Impact on Total Bill (dollars)				$ (9.83)		$ (7.69)		$ (3.39)		$ 0.90
Impact on Total Bill (percentage)				-17%		-11%		-4%		1%

	Proposed Rate	Flat Rate Equivalent	Billed kWh 750.00 Bill at Current Rate	Billed kWh 750.00 Bill at Flat Rate Equivalent	Billed kWh 1,000.00 Bill at Current Rate	Billed kWh 1,000.00 Bill at Flat Rate Equivalent	Billed kWh 1,500.00 Bill at Current Rate	Billed kWh 1,500.00 Bill at Flat Rate Equivalent	Billed kWh 2,000.00 Bill at Current Rate	Billed kWh 2,000.00 Bill at Flat Rate Equivalent
Customer Charge per month	10.0000		$ 10.00	$ 10.00	$ 10.00	$ 10.00	$ 10.00	$ 10.00	$ 10.00	$ 10.00
Low-Income Pilot Program Charge – per month	0.0300		$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03
Energy Charge		0.0595		$ 44.65		$ 59.53		$ 89.30		$ 119.07
First 750 kWh	0.0747		$ 56.03		$ 56.03		$ 56.03		$ 56.03	
Over 750 kWh	0.0498		$ -		$ 12.40		$ 37.20		$ 62.00	
Energy Efficiency Program Charge – per kWh	0.0060		$ 4.50	$ 4.50	$ 6.00	$ 6.00	$ 9.00	$ 9.00	$ 12.00	$ 12.00
Total Bill			$ 70.56	$ 59.18	$ 84.46	$ 75.56	$ 112.26	$ 108.33	$ 140.06	$ 141.10
Impact on Total Bill (dollars)				$ (11.37)		$ (8.89)		$ (3.92)		$ 1.04
Impact on Total Bill (percentage)				-16%		-11%		-3%		1%

	Current Rate	Flat Rate Equivalent	Billed kWh 4,000.00 Bill at Current Rate	Billed kWh 4,000.00 Bill at Flat Rate Equivalent	Billed kWh 6,000.00 Bill at Current Rate	Billed kWh 6,000.00 Bill at Flat Rate Equivalent	Billed kWh 10,000.00 Bill at Current Rate	Billed kWh 10,000.00 Bill at Flat Rate Equivalent	Billed kWh 15,000.00 Bill at Current Rate	Billed kWh 15,000.00 Bill at Flat Rate Equivalent
Customer Charge per month	8.0000		$ 8.00	$ 8.00	$ 8.00	$ 8.00	$ 8.00	$ 8.00	$ 8.00	$ 8.00
Low-Income Pilot Program Charge – per month	0.0300		$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03
Energy Charge		0.0547		$ 218.75		$ 328.13		$ 546.88		$ 820.32
First 750 kWh	0.0678		$ 50.85		$ 50.85		$ 50.85		$ 50.85	
Over 750 kWh	0.0461		$ 149.83		$ 242.03		$ 426.43		$ 656.93	
Total Bill			$ 208.71	$ 226.78	$ 300.91	$ 336.16	$ 485.31	$ 554.91	$ 715.81	$ 828.35
Impact on Total Bill (dollars)				$ 18.08		$ 35.25		$ 69.61		$ 112.55
Impact on Total Bill (percentage)				9%		12%		14%		16%

	Proposed Rate	Flat Rate Equivalent	Billed kWh 4,000.00 Bill at Current Rate	Billed kWh 4,000.00 Bill at Flat Rate Equivalent	Billed kWh 6,000.00 Bill at Current Rate	Billed kWh 6,000.00 Bill at Flat Rate Equivalent	Billed kWh 10,000.00 Bill at Current Rate	Billed kWh 10,000.00 Bill at Flat Rate Equivalent	Billed kWh 15,000.00 Bill at Current Rate	Billed kWh 15,000.00 Bill at Flat Rate Equivalent
Customer Charge per month	10.0000		$ 10.00	$ 10.00	$ 10.00	$ 10.00	$ 10.00	$ 10.00	$ 10.00	$ 10.00
Low-Income Pilot Program Charge – per month	0.0300		$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03
Energy Charge		0.0595		$ 238.13		$ 357.20		$ 595.34		$ 893.01
First 750 kWh	0.0747		$ 56.03		$ 56.03		$ 56.03		$ 56.03	
Over 750 kWh	0.0496		$ 161.20		$ 260.40		$ 458.80		$ 706.80	
Energy Efficiency Program Charge – per kWh	0.0060		$ 24.00	$ 24.00	$ 36.00	$ 36.00	$ 60.00	$ 60.00	$ 90.00	$ 90.00
Total Bill			$ 251.26	$ 272.16	$ 362.46	$ 403.23	$ 584.86	$ 665.37	$ 862.86	$ 993.04
Impact on Total Bill (dollars)				$ 20.91		$ 40.78		$ 80.51		$ 130.18
Impact on Total Bill (percentage)				8%		11%		14%		15%