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Exhibit No.:	
Issues:	Cost of Service, Revenue Allocation, Rate Design
Witness:	Steve W. Chriss
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Wal-Mart Stores East, LP and Sam's East, Inc.
Case No.:	ER-2014-0258
Date Testimony Prepared:	December 19, 2014

MISSOURI PUBLIC SERVICE COMMISSION

In the Matter of Union Electric Company, d/b/a Ameren Missouri's Tariff to Increase Its Revenues For Electric Service	)))	Case No. ER-2014-0258

DIRECT TESTIMONY AND SCHEDULES OF STEVE W. CHRISS

ON BEHALF OF

WAL-MART STORES EAST, LP AND SAM'S EAST, INC.

Dated: December 19, 2014

Contents

Introduction

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.

A. My name is Steve W. Chriss. My business address is 2001 SE 10th St., Bentonville, AR 72716-0550. I am employed by Wal-Mart Stores, Inc. as Senior Manager, Energy Regulatory Analysis.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?

A. I am testifying on behalf of Wal-Mart Stores East, LP and Sam's East, Inc. (collectively "Walmart").

Q. ARE YOU THE SAME STEVE W. CHRISS WHO TESTIFIED IN THE REVENUE REQUIREMENT PHASE OF THIS CASE?

A. Yes.

Q. ARE YOU SPONSORING ANY ADDITIONAL SCHEDULES WITH YOUR TESTIMONY?

A. Yes. I am sponsoring the following schedules:

Schedule SWC-8 – Calculation of Rate of Return Index ("RRI") by Customer Class

Schedule SWC-9 – Calculation of Large General Service ("LGS") and Small Primary Service ("SP") Rate of Return Index Values

Schedule SWC-10 – Demonstration of Proposed Revenue Allocation Methodology

Schedule SWC-11 – Determination of LGS and SP Cost of Service and Revenues by Customer, Demand, and Energy

Schedule SWC-12 – Ameren LGS Rate Design Workpaper

Schedule SWC-13 – Ameren SP Rate Design Workpaper

Schedule SWC-14 – Calculation of Effective Demand Rates, Proposed LGS Summer

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to respond to cost of service, revenue allocation, and rate design issues related to the rate case filing of Union Electric Company d/b/a Ameren Missouri ("Ameren" or "the Company").

Summary of Recommendations

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE COMMISSION.

A. My recommendations to the Commission are as follows:

1) The Commission should allocate any revenue increase in this docket using the following steps:
    1) Apply a 25 percent revenue neutral movement towards cost of service, per the Commission's approved cost of service study results, to the revenue requirement for each rate class;
    2) Allocate the approved overall revenue requirement increase on an equal percent basis to all customer classes; and
    3) If the difference between the Company's proposed revenue requirement and the Commission's approved revenue requirement results in steps (1) and (2) assigning a rate class an increase above 9.65 percent, mitigate that increase so that no class receives a rate increase in excess of 9.65 percent.

2) For LGS and SP, the Commission should:

1) Maintain the second and third block energy rates at their current rates and increase the customer charges by the customer class percent revenue increase; and

2) Apply half of the remaining increase to the first block energy charge and the other half of the remaining increase to the demand charge.

3) The Commission should order Ameren to develop alternative rate designs for LGS and SP that more closely reflect the Company's cost of service and do not use the hours-use rate design for the energy charge and present those alternatives in its next base rate case.

4) The Commission should consider cost of service-based rates in its consideration of the rate design question pursuant to the October 20, 2014, Order Directing Consideration of a Rate Design Question.

The fact that an issue is not addressed herein or in related filings should not be construed as an endorsement of any filed position.

Cost of Service and Revenue Allocation

Q. GENERALLY, WHAT IS WALMART'S POSITION ON SETTING RATES BASED ON THE UTILITY'S COST OF SERVICE?

A. Walmart advocates that rates be set based on the utility's cost of service. This produces equitable rates that reflect cost causation, sends proper price signals, and minimizes price distortions.

Q. DOES WALMART TAKE A POSITION ON THE COMPANY'S PROPOSED COST OF SERVICE MODEL AT THIS TIME?

A. No. However, to the extent that alternative cost of service models or modifications to the Company's model are proposed by other parties, Walmart reserves the right to address any such changes in rebuttal testimony. My understanding is that the Commission determined in Case No. ER-2010-0036 that the Company's cost of service study was the "most reliable" of the studies submitted in that case. *See* Report and Order, May 28, 2010, Case No. ER-2010-0036, page 87.

Q. HOW DOES THE COMPANY REPRESENT WHETHER RATES FOR A CUSTOMER CLASS ACCURATELY REFLECT THE UNDERLYING COST CAUSATION?

A. The Company represents this relationship in their cost of service results through the use of class-specific rates of return. *See* Schedule WMW-1. These rates of return can be converted into a rate of return index ("RRI"), which is an indexed measure of the relationship of the rate of return for an individual rate class to the total system rate of return. A RRI greater than 1.0 means that the rate class is paying rates in excess of the costs incurred to serve that class, and a RRI less than 1.0 means that the rate class is paying rates less than the costs incurred to serve that class. As such, those rate classes with a RRI greater than 1.0 shoulder some of the revenue responsibility burden for the classes with a RRI less than 1.0.

Q. HAVE YOU CALCULATED A RRI BASED ON AMEREN'S COST OF SERVICE RESULTS?

A. Yes, as shown in Table 1 below.

Table 1. Rate of Return Index, Ameren Proposed Cost of Service Study Results.		
Customer Class	Rate of Return	Rate of Return Index Value
Residential	2.73%	0.62
Small General Service	6.12%	1.38
Large General Service/Small Primary	7.57%	1.71
Large Primary	4.22%	0.95
Large Transmission	1.64%	0.37
Lighting	4.58%	1.03
Total Missouri	4.44%	1.00
Sources: Schedule SWC-8 and Schedule WMW-1		

Q. DO THE RATES FOR LGS AND SP PROVIDE A RATE OF RETURN FOR THE COMPANY ABOVE THEIR COST OF SERVICE LEVELS?

A. Yes. As shown in Table 1, Ameren's cost of service model results show that LGS and SP, with a RRI of 1.71, provide a rate of return significantly above the cost of service level for each class.

Q. HAVE LGS AND SP RATES PROVIDED A RATE OF RETURN ABOVE THEIR COST OF SERVICE LEVELS SINCE THE COMPANY'S 2007 RATE CASE?

A. Yes. As shown in Table 2, LGS and SP have provided a rate of return above their cost of service levels in every rate case back to and including the Company's 2007 rate case.

Table 2. LGS/SP Rate of Return, Ameren Cost of Service Study Results, Past Rate Cases.

Case	LGS/SP Rate of Return	Total Missouri Rate of Return	Rate of Return Index Value
ER-2007-0002 (LGS)	5.86%	2.74%	2.14
ER-2007-0002 (SP)	4.47%	2.74%	1.63
ER-2008-0318	7.01%	4.06%	1.73
ER-2010-0036	6.12%	1.89%	3.24
ER-2011-0028	8.26%	4.59%	1.80
ER-2012-0166	6.32%	2.89%	2.19
Present Case	7.57%	4.44%	1.71

Source: Schedule SWC-9

Q. HAVE LGS AND SP CUSTOMERS PAID RATES IN EXCESS OF COST OF SERVICE DURING THIS PERIOD AS WELL?

A. Yes. An examination of the "revenue neutral" results[1] of the Ameren class cost of service studies from the past five rate cases show that rates for LGS and SP have been set well in excess of cost of service since the 2007 rate case. Table 3 summarizes the Company's final class cost of service study results in each case.[2]

Table 3. Summary of Revenue Changes, Per Ameren Cost of Service Study Results, Required to Move LGS and SP to Cost of Service in Previous Ameren Rate Cases.

Rate Case	Revenue Change Required to Move LGS/SP to Cost of Service ($)	(%)
ER-2007-0002		
LGS	($43,441,000)	-10.2%
SP	($8,148,000)	-4.5%
ER-2008-0318 (LGS & SP)	($47,863,000)	-7.66%
ER-2010-0036 (LGS & SP)	($64,785,000)	-9.74%
ER-2011-0028 (LGS & SP)	($63,653,000)	-8.94%
ER-2012-0166 (LGS & SP)	($59,937,000)	-7.99%

Source: Exhibit SWC-3 and Exhibit SWC-4

[1] "Revenue neutral" results represent the revenue change for each class necessary to bring that class to its cost of service level per the cost of service study results.

[2] Table 3 was presented in my Revenue Requirement testimony as Table 1.

Q. HAS THE COMPANY CALCULATED THE REVENUE NEUTRAL REVENUE CHANGES REQUIRED TO BRING EACH CLASS TO COST OF SERVICE PER THE COMPANY'S COST OF SERVICE STUDY IN THIS CASE?

A. Yes. For LGS and SP, the revenue neutral revenue change required is a reduction of approximately $59.8 million, or 7.44 percent. *See* Workpapers of William M. Warwick, SCH 1.

Q. DOES THE COMPANY STATE THAT EQUAL RATES OF RETURN FOR EACH CLASS ARE AN APPROPRIATE STARTING POINT WHEN DESIGNING RATES?

A. Yes. The Company states that equal rates of return for all customer classes are an appropriate starting point for designing rates for three reasons:

1) Equity and fairness to all electric customers;
2) Encouraging cost effective utilization of electricity by customers; and
3) Competition, in that cost-based electric rates permit the Company to compete with alternative fuels, co-generation, and other electric providers for new commercial and industrial customers. *See* Direct Testimony of William R. Davis, page 14, line 1 to line 12.

Q. HAS THE COMPANY STATED IN THE PAST THE ROLE OF A REGULATOR RELATIVE TO COST OF SERVICE IN THE SETTING OF RATES?

A. Yes. In Case No. EC-2014-0224, Ameren witness Terry M. Jarrett states that "The regulator's job is to make sure the rates are fair according to the cost of service for

each class." *See* Case No. EC-2014-0224, Rebuttal Testimony of Terry M. Jarrett, page 6, line 9 to line 10.

Q. DOES THE COMPANY'S PROPOSED REVENUE ALLOCATION USE WHAT THE COMPANY CHARACTERIZES AS "AN APPROPRIATE STARTING POINT" FOR THEIR PROPOSED REVENUE ALLOCATION?

A. No. The Company chooses to ignore its own cost of service study and proposes an across the board equal percentage increase for all rate classes. *See* Direct Testimony of William R. Davis, page 15, line 10 to line 11. This proposal by extension also ignores all other cost of service studies that may be filed in this case, as an equal percentage increase is not, as a general practice, intended to address inter-class subsidies at the revenue allocation level, nor intra-class subsidies, at the class rate design level.

Q. DO YOU HAVE CONCERNS WITH THE COMPANY'S PROPOSED REVENUE ALLOCATION?

A. Yes, as the Company recognizes in its filing that rates are not currently set at cost of service levels, but fails to make any movement towards cost of service rate levels for each customer class.

Q. HAS AMEREN AGAIN PROPOSED AN INCREASE FOR LGS AND SP CUSTOMERS IN EXCESS OF THE COST TO SERVE THOSE CLASSES?

A. Yes. As I first discussed in my Revenue Requirement testimony, per Ameren's cost of service study results in this case, at the Company's proposed revenue requirement LGS and SP should receive a **1.1** percent increase. However, the Company has proposed a **9.64** percent increase for both LGS and SP – about *8.5 percent above the*

cost of service-based level at the Company's proposed revenue requirement. *See* Direct Testimony of William R. Davis, page 15, line 1, and page 17, line 1. As such, Ameren is proposing that LGS rates be set approximately $49.2 million above cost of service for the LGS class and that SP rates be set approximately $19.4 million above cost of service for the SP class. *See* Schedule SWC-5.

Q. DO THE COMPANY'S PROPOSED INCREASES CONSTITUTE EQUITABLE AND FAIR INCREASES FOR LGS AND SP CUSTOMERS?

A. No. Requiring LGS and SP customers to pay rates that are, in total, approximately $68.7 million, or 8.5 percent above cost of service is neither equitable nor fair. The Company's proposal is also counter-intuitive when framed against their concern about being able to compete against alternative fuels and other utilities, as the Company is pursuing a revenue allocation in this case that makes their rates *less* competitive against alternatives.

As such, the Commission should determine that it is appropriate as part of this case to make some movement towards cost of service-based rates for the customer classes.

Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION?

A. The Commission should allocate any revenue increase in this docket using the following steps:

1) Apply a 25 percent revenue neutral movement towards cost of service, per the Commission's approved cost of service study results, to the revenue requirement for each rate class;

2) Allocate the approved overall revenue requirement increase on an equal percent basis to all customer classes; and

3) If the difference between the Company's proposed revenue requirement and the Commission's approved revenue requirement results in steps (1) and (2) assigning a rate class an increase above 9.65 percent, mitigate that increase so that no class receives a rate increase in excess of 9.65 percent.

Q. CAN YOU PROVIDE AN EXAMPLE OF YOUR RECOMMENDATION?

A. Yes. I calculated a scenario in which the Commission approves (1) an overall revenue requirement increase of approximately $226 million, which represents the reduction in revenue requirement from rejection of the Company's proposed increase in return on equity as shown in my Revenue Requirement testimony and (2) the Company's proposed cost of service study and the revenue neutral movements resulting from the study results. *See* Schedule SWC-6 and Schedule SWC-10. The result of steps (1) and (2) is that all classes except for LTS require no mitigation. The excess LTS revenue would then be spread per Commission discretion across the other rate schedules so that LTS would not experience an increase above 9.65 percent.

Rate Design

Q. WHAT IS YOUR UNDERSTANDING OF HOW THE COMPANY PROPOSES TO APPLY THE REVENUE REQUIREMENT INCREASE TO THE CHARGES CONTAINED IN THE LGS AND SP SCHEDULES?

A. My understanding is that the Company proposes to apply the revenue requirement increase to the charges contained in the LGS and SP schedules on an equal percentage basis. *See* Direct Testimony of William R. Davis, page 17, line 7 to line 8.

Q. DO YOU HAVE CONCERNS WITH THE COMPANY'S RATE DESIGN PROPOSAL FOR LGS AND SP?

A. Yes. My concerns with the rate design proposal for LGS and SP is that it (1) does not reflect the underlying cost of service and (2) it shifts cost responsibility within the rate class in that it charges customers for demand-related costs on energy charges. Additionally, I am concerned that the hours-use energy charge structure is not the most simple and transparent rate to communicate energy and demand price signals.

Q. WHAT PERCENT OF PROPOSED NON-ENERGY EFFICIENCY BASE REVENUES FOR THE LGS AND SP ARE DEMAND-RELATED?

A. The Company's workpapers indicate that, per the cost of service study results, approximately 66.1 percent of non-energy efficiency base revenues for LGS and SP are demand-related and approximately 31.7 percent are energy-related. *See* Exhibit SWC-11. However, under the proposed rate designs for LGS and SP, a large portion of these demand-related costs would be inappropriately collected on the energy charges.

Q. PLEASE EXPLAIN.

A. Both LGS and SP utilize three-block "hours-use" rate structures as their energy charges, which set the billing kWh for each block based on the kWh used for each kW of billing demand, or load factor for the billing month. One rate is charged for the first 150 kWh used per kW of billing demand, a second lower rate is charged for the next 200 kWh used per kW of billing demand, and all additional kWh are charged the lowest third block rate. For LGS, this proposed rate design would collect approximately 86.4 percent of revenues on the $/kWh energy charges and approximately 11.7 percent of revenues on the demand charges. For SP, the proposed rate design would collect approximately 90.5 percent of revenues on the $/kWh energy charges and approximately 8.4 percent on the demand charges. *Id.* The Company's proposed demand charges do not even cover transmission and distribution demand costs, which constitute approximately 19.8 percent of the costs to serve LGS and SP. *See* Exhibit SWC-11.

Q. IS THE COLLECTION OF DEMAND-RELATED COSTS THROUGH AN ENERGY CHARGE CONSISTENT WITH THE COMPANY'S CLASSIFICATION AND ALLOCATION OF DEMAND-RELATED COSTS?

A. No. The Company does not classify or allocate any of the demand-related costs on an energy basis. These costs are incurred based on customer demand or number of customers. Costs should be collected in a manner which reflects how they are incurred, and collecting demand-related costs through an energy charge violates cost causation principles.

Q. DOES THE RECOVERY OF DEMAND-RELATED COSTS ON AN ENERGY CHARGE DISADVANTAGE HIGHER LOAD FACTOR CUSTOMERS?

A. Yes. The shift of demand-related costs from per kW demand charges to per kWh energy charges results in a shift in demand cost responsibility from lower load factor customers to higher load factor customers. This results in misallocation of cost responsibility as higher load factor customers overpay for the demand-related costs incurred by the Company to serve them.

Q. CAN YOU PROVIDE A GENERAL ILLUSTRATION OF A SHIFT IN DEMAND COST RESPONSIBILITY?

A. Yes. To provide my illustration, I assume the following:

a) A utility has only two customers (Customer 1 and Customer 2), with individual monthly peak demands of 20 kW for a total monthly system load of 40 kW.

b) The annual revenue requirement or cost to the utility associated with the investment for the 40 kW infrastructure is $2,000, and the entire cost will be collected each year, so each customer has caused the utility to incur $1,000 of demand-related or fixed costs.

c) Customer 1 has a monthly demand of 20 kW and a load factor of 60 percent and thus consumes 105,120 kWh/year (20 kW * 0.6 * 8760).

d) Customer 2 has a monthly demand of 20 kW and load factor of 30 percent and thus consumes 52,560 kWh/year (20kW * 0.3 * 8760).

Q. IF THE DEMAND-RELATED COSTS WERE CHARGED ON A PER KW BASIS, WHAT WOULD THE PER KW CHARGE BE?

A. The charge would be $4.17 per kW-month ($2,000 / 40 kW / 12 months). Each customer would then pay $1,000 for the demand-related cost they impose on the system (20 kW * $4.17/kW * 12).

Q. IF THE DEMAND-RELATED COSTS WERE CHARGED ON A PER KWH BASIS, WHAT WOULD THE PER KWH CHARGE BE?

A. If the utility were to charge the demand-related costs on a per kWh basis, the energy charge would be 1.27 cents/kWh (or $0.0127/kWh). This is calculated as follows: $2,000 / 157,680 kWh, using total company sales (i.e., the sum of the two customers' annual kWh usage) as the denominator.

Q. WHAT WOULD EACH CUSTOMER PAY UNDER THE PER KWH CHARGE?

A. Customer 1, who caused the utility to incur $1,000 in demand-related costs, with a load factor of 60 percent and an annual usage of 105,120 kWh, would pay $1,333 ($0.0127/kWh * 105,120 kWh). Customer 2, who also caused the utility to incur $1,000 in demand-related costs, with a load factor of 30 percent and an annual usage of 52,560 kWh, would pay $667 ($0.0127/kWh * 52,560).

Q. IS THIS AN EQUITABLE RESULT?

A. No. Even though each customer caused the utility to incur $1,000 in demand costs, the utility will be over-recovering from one customer and under-recovering from the other. Under the per kWh scenario, the utility would over-recover from Customer 1, the higher load factor customer, by $333 (i.e. $1,333 in revenues minus $1,000 in costs), and under-recover from Customer 2, the lower load factor customer, by $333 (i.e. $667 in revenues minus $1,000 in costs).

Q. DOES THE COMPANY'S HOURS-USE STRUCTURE MITIGATE SOME OF THE SHIFT OF DEMAND-COSTS TO HIGH LOAD FACTOR CUSTOMERS?

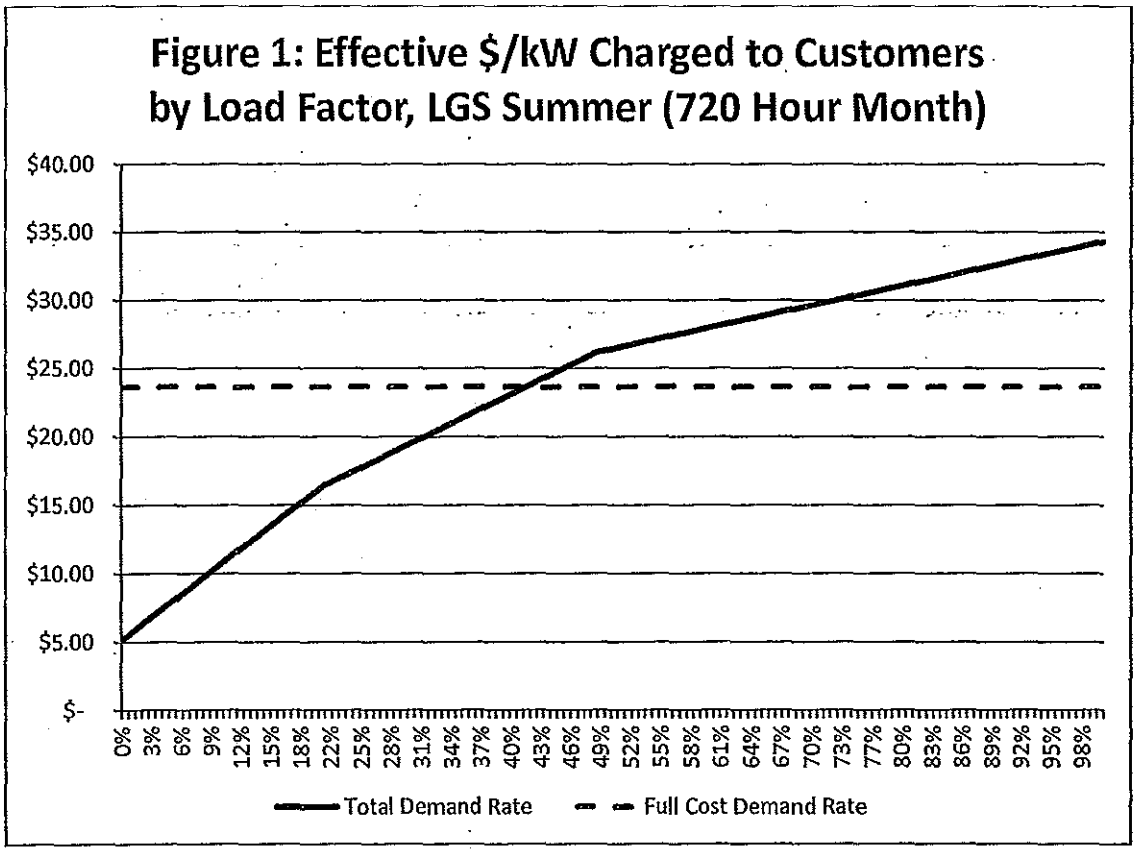
A. No, as it appears that a significant amount of demand costs are proposed to be recovered in the third, or high load factor, block. *See* Schedule SWC-14, column (6).

Q. PLEASE EXPLAIN.

A. I performed an analysis of the proposed LGS summer rates to derive the effective cost per kW charged across a range of load factors based on a 720 hour (30 day) month for a 1,000 kW customer. To do this, I first calculated a flat cost of service-based $/kWh energy rate to represent the energy component of the LGS cost of service. *Id.,* line (3) to line (6). I assumed that the $/kWh energy rate is flat across all kWh of usage, and subtracted the energy rate from the hours-use charge to determine the effective hours-use $/kWh demand-related rate for each block and applied that rate to each of the 720 hours in the month. *Id,* line (13), column (1) to column (6). I divided the cost to the customer of the demand portion of the energy rate by 1,000 kW to determine the cost per kW and added the Company's proposed demand charge in order to determine the total effective cost per kW for the customer. I then estimated a full cost demand charge for LGS summer rates to determine the $/kW subsidy received or paid at a given load factor for the month.

Q. **WHAT DOES YOUR ANALYSIS SHOW?**

A. My analysis highlights two issues. First, Figure 1 shows, as load factor increases, the cost per kW charged to customers for demand-related costs increases. Second, as load factor increases from zero to 41.3 percent, the cost per kW charged to customers for demand-related costs is below the full cost demand rate and, as such, a subsidy is received by the customer. As load factor increases beyond 41.4 percent, the customer overpays for demand by an increasing amount.



These results are a concern, because as discussed above, the demand-related cost incurred to serve a customer does not change with that customer's load factor, and, like an increase in per kWh energy consumption, an increase in load factor

should not result in an increase in the demand-related cost per kW charged to that customer.

Q. IN YOUR OPINION, IS THE HOURS-USE STRUCTURE THE MOST SIMPLE AND TRANSPARENT MANNER IN WHICH TO COMMUNICATE ENERGY AND DEMAND PRICE SIGNALS?

A. No. The hours-use structure is not the simplest manner as it requires the analyst to have more than a basic understanding of the rate structure in order to understand the interplay of the energy rate and load factor. Additionally, it is not the most transparent structure, as, in addition to the underlying demand-related cost issue discussed above, it does not provide clear energy and price signals, as changes in billed demand and energy have impacts that are not easily calculated without a copy of the tariff and a spreadsheet.

Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION?

A. For the LGS and SP rate designs, the Commission should:

1) Maintain the second and third block energy rates at their current rates and increase the customer charges by the customer class percent revenue increase; and
2) Apply half of the remaining increase to the first block energy charge and the other half of the remaining increase to the demand charge.

Additionally, the Commission should order Ameren to develop alternative rate designs for LGS and SP that more closely reflect the Company's cost of service

and do not use the hours-use rate design for the energy charge and present those alternatives in its next base rate case.

Commission Order Directing Consideration of a Certain Rate Design Question

Q. WHAT IS YOUR UNDERSTANDING OF THE COMMISSION'S ORDER DIRECTING CONSIDERATION OF A CERTAIN RATE DESIGN QUESTION?

A. My understanding is that in its October 20, 2014, Order, the Commission asks whether rate design mechanisms should be established to promote stability or growth of customer levels in geographic locations where there is under-utilization of existing infrastructure.

Q. IS THERE A RELATIONSHIP BETWEEN THE REVENUE ALLOCATION AND RATE DESIGN ISSUES DISCUSSED ABOVE AND THE COMMISSION'S OCTOBER 20, 2014 ORDER DIRECTING CONSIDERATION OF RATE DESIGN AND UTILIZATION OF EXISTING INFRASTRUCTURE?

A. Absolutely. As I describe above, LGS and SP customers already pay rates that are well above cost of service and the Company proposes to continue that practice in the amount of $68.7 million per year. Additionally, the Small General Service ("SGS") class also pays rates that are above cost of service, and the Company proposes an increase for those customers that is approximately 4.5 percent higher than a cost of service-based increase. *See* Direct Testimony of William R. Davis, Table 3 and Table 4.

Ameren has approximately 156,725 non-residential, non-lighting customers. Of those customers, approximately 145,756 are SGS customers, 10,248

are LGS customers, and 650 are SP customers. *See* Workpapers of William R. Davis, Summary. Of Ameren's approximately 156,725 non-residential, non-lighting customers, 156,654 are on rate schedules for which customers are proposed to over-pay their costs of service by at least 4.5 percent. Additionally, as discussed in my Revenue Requirement testimony, Ameren's revenue per kWh for LGS has increased 47.8 percent from 2004 to 2013. *See* Schedule SWC-2. These are factors that impact businesses that cannot be ignored in any consideration of rate designs meant to grow or sustain customer levels.

Q. SHOULD THE COMMISSION CONSIDER COST OF SERVICE-BASED RATES IN ITS CONSIDERATION OF THE RATE DESIGN QUESTION?

A. Yes, the Commission should consider cost of service-based rates in its consideration of the rate design question. Addressing the underlying issues within the Company's rates may help to reduce the need for special economic development tariffs.

Large Transmission Service and Noranda Aluminum

Q. IS THERE, AT THE TIME OF FILING OF THIS TESTIMONY, AN ACTIVE FILED PROPOSAL REGARDING THE LTS SCHEDULE AND NORANDA?

A. No. However, given that a non-unanimous stipulation was filed earlier in the case regarding Noranda rates, I anticipate that such a proposal may be filed in the rate design round of testimony. Generally, Walmart reserves the right to fully address any filed proposals in rebuttal testimony.

Q. SHOULD THE COMMISSION'S DETERMINATION OF ANY FILED PROPOSAL IMPACT ITS CONSIDERATION OF BASE REVENUE ALLOCATION OR RATE DESIGN?

A. No. Unless any filed proposal would constitute a permanent modification to the Company's base rates, that proposal should not impact the consideration of base rate issues such as revenue allocation or rate design.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Customer Class	Rate of Return (%) (1)	Rate of Return Index Value (2) (1) / Total Missouri
Residential	2.73%	0.62
Small General Service	6.12%	1.38
Large General Service/Small Primary	7.57%	1.71
Large Primary	4.22%	0.95
Large Transmission	1.64%	0.37
Lighting	4.58%	1.03
Total Missouri	**4.44%**	**1.00**

Source: Schedule WMW-1

Case	LGS/SP Rate of Return (%) (1)	Total Missouri Rate of Return (%) (2)	Rate of Return Index Value (3) (1) / (3)
ER-2007-0002 (LGS)	5.86%	2.74%	2.14
ER-2007-0002 (SP)	4.47%	2.74%	1.63
ER-2008-0318	7.01%	4.06%	1.73
ER-2010-0036	6.12%	1.89%	3.24
ER-2011-0028	8.26%	4.59%	1.80
ER-2012-0166	6.32%	2.89%	2.19
Present Case	7.57%	4.44%	1.71

Sources:
Case No. ER-2007-0002, Exhibit WMW-1
Case No. ER-2008-0318, Exhibit WMW-E1
Case No. ER-2010-0036, Exhibit WMW-E1
Case No. ER-2011-0028, Exhibit WMW-E1
Case No. ER-2012-0166, Exhibit WMW-E1

Revenue Requirement Decrease From Proposed	$ (37,503,000)

Customer Class	Current Revenues ($) (1)	Proposed Increase ($) (2)	Allocation of Proposed Increase (%) (3) (2) / Total	Revenue Neutral Shift, Ameren COSS ($) (4)	25 Percent Movement ($) (5) (4) x 0.25	Allocation of Overall RR Reduction ($) (6) RRR x (3)	Net Revenue Change ($) (7) (2) + (5) + (6)	Net Revenue Change (%) (8) (7) / (1)	Amount to Mitigate ($) (9) (8) - (2)
Residential	$ 1,230,497,365	$ 118,691,987	45.0%	$ 62,576,000	$ 15,644,000	$ (16,860,154)	$ 117,475,833	9.55%	$ -
Small General Service	$ 302,777,223	$ 29,203,178	11.1%	$ (13,391,000)	$ (3,347,750)	$ (4,148,301)	$ 21,707,127	7.17%	$ -
Large General Service	$ 576,863,372	$ 55,613,798	21.1%	$ (42,943,155)	$ (10,735,789)	$ (7,899,920)	$ 36,978,089	6.41%	$ -
Small Primary	$ 227,596,391	$ 21,940,323	8.3%	$ (16,942,845)	$ (4,235,711)	$ (3,116,615)	$ 14,587,997	6.41%	$ -
Large Primary	$ 202,782,047	$ 19,541,992	7.4%	$ 1,030,000	$ 257,500	$ (2,775,933)	$ 17,023,559	8.40%	$ -
Large Transmission	$ 159,333,049	$ 15,361,303	5.8%	$ 9,830,000	$ 2,457,500	$ (2,182,068)	$ 15,636,735	9.81%	$ 275,432
Lighting	$ 37,876,368	$ 3,653,717	1.4%	$ (158,000)	$ (39,500)	$ (519,009)	$ 3,095,208	8.17%	$ -
MSD	$ 73,018	$ 7,044	0.0%	$ -	$ -	$ (1,001)	$ 6,043	8.28%	$ -
Total	**$ 2,737,798,833**	**$ 264,013,342**					**$ 226,510,592**		

Note: The LGS and SP revenue neutral shifts sum to ($59,886,000) per the COSS and are allocated on the basis of current revenues.

Sources:
(1) - (2): Direct Testimony of William R. Davis, Table 4
(4): UE_DIR-UE-DIR_007-Att-MO ECCOS_2015 Filed 7_3_14.xls, SCH 2

Function	Cost of Service by Function Class Cost of Service ($000) (1)	Cost of Service by Function Class Cost of Service (%) (2) (1) / Total	Large General Service Revenue by Function Current Rates ($000) (3)	Large General Service Revenue by Function Current Rates (%) (4) (3) / Total	Small Primary Revenue by Function Current Rates ($000) (5)	Small Primary Revenue by Function Current Rates (%) (6) (5) / Total
Customer	$ 17,957	2.2%	$ 12,109	1.9%	$ 2,631	1.1%
Production - Demand	*$ 376,932*	*46.3%*				
Transmission - Demand	*$ 35,600*	*4.4%*				
Distribution - Demand	*$ 124,989*	*15.4%*				
Total Demand	$ 537,521	66.1%	$ 73,357	11.7%	$ 20,867	8.4%
Energy	$ 258,015	31.7%	$ 542,149	86.4%	$ 225,016	90.5%
Total Non-EE Revenue	**$ 813,493**	**166%**	**$ 627,614**	**100%**	**$ 248,514**	**100%**

Sources:
Schedule SWC-12 and Schedule SWC-13
William M. Warwick Workpapers, Unbundled

Large General Service Rate Comparison
Ameren Missouri
Weather Normalized-12 months ending March 2014
Growth to December 2014

Billing Components										
					Target	$632,510,082				Variation rounded minus not rou
Summer (June - September)		Rate	Units	$	Increase	9.78%				
						Proposed Rate				
Customer Charge	Per Month	$88.32	41,449	$3,660,804		$96.96	$4,018,926	96.96	$4,018,798	
Customer Charge TOD	Per Month	$107.82	164	$17,637		$118.34	$19,358	118.36	$19,362	
Low Income Program Charge	Per Month	$0.00	41,613	$0		$0.00	$0	0.00	$0	
Energy Charge (¢ per kWh)										
First 150 kWh per KW		9.89 ¢	1,163,123,672	$115,032,931		10.86	$126,315,231	10.857	$126,282,117	$33,114
Next 200 kWh per KW		7.44 ¢	1,263,783,662	$94,025,504		8.17	$103,251,125	8.168	$103,220,353	$30,772
All over 350 kWh per KW		5.00 ¢	504,528,272	$25,226,414		5.49	$27,698,602	5.489	$27,693,330	$5,272
TOD On Peak Adjust. per Kwh		1.17 ¢	5,589,865	$65,401		1.28	$71,550	1.28	$71,797	-$247
TOD Off Peak Adjust. per Kwh		-0.66 ¢	11,780,036	-$77,748		-0.72	-$84,816	-0.72	-$85,351	$535
Energy Efficiency per Kwh		0.08 ¢	2,931,435,606	$2,345,148		0.08	$2,345,148	0.08	$2,277,922	$67,227
Opt Out EE per Kwh		-0.08 ¢	61,561,735	-$49,249		-0.08	-$49,249	-0.08	-$47,838	-$1,412
Demand										
Per KW of Billing Demand		$4.62	8,516,045	$39,344,128		$5.07	$43,176,349	5.072	$43,191,630	
Winter (October - May)										
Customer Charge	Per Month	$88.32	82,853	$7,317,570		$96.96	$8,033,419	96.96	$8,033,163	
Customer Charge TOD	Per Month	$107.82	312	$33,631		$118.34	$36,912	118.36	$36,920	
Low Income Program Charge	Per Month	$0.00	83,165	$0		$0.00	$0	0.00	$0	
Energy Charge (¢ per kWh)										
First 150 kWh per KW		6.23 ¢	1,894,055,751	$117,999,673		6.84	$129,553,413	6.839	$129,538,980	$14,434
Next 200 kWh per KW		4.62 ¢	2,061,036,697	$95,219,895		5.506	$104,288,457	5.072	$104,531,544	-$243,088
All over 350 kWh per KW		3.63 ¢	848,824,811	$30,812,341		3.907	$33,698,345	3.985	$33,825,510	-$127,165
Seasonal Energy Charge		3.83 ¢	437,409,324	$15,877,958		3.97	$17,365,150	3.985	$17,430,680	-$65,530
TOD On Peak Adjust. per Kwh		0.35 ¢	8,747,861	$30,618		0.38	$33,242	0.38	$33,612	-$370
TOD Off Peak Adjust. per Kwh		-0.20 ¢	18,866,345	-$37,733		-0.22	-$41,506	-0.22	-$41,423	-$83
Energy Efficiency per Kwh		0.05 ¢	5,241,326,584	$2,620,663		0.05	$2,620,663	0.0456	$2,392,056	$228,608
Opt Out EE per Kwh		-0.05 ¢	106,807,282	-$53,404		-0.05	-$53,404	-0.0456	-$48,745	-$4,659
Demand										
Per KW of Billing Demand		$1.71	16,053,326	$27,451,187		$1.88	$30,180,253	1.877	$30,135,667	
			8,172,762,190	$576,863,372			$632,477,169		$632,510,082	
							$55,613,798			
						Variance	-$32,913		$0	

EE	Pro-MEEIA		
Summer	$2,295,899		
Winter	$2,567,260		$4,863,159
	$4,863,159		$289,764

	KWH	Allocation for Seasons		Total Pro-MEEIA
				$4,573,395
Summer	2,869,873,871	$275,912,530	0.488	$2,230,084
Winter	5,134,519,303	$289,921,200	0.512	$2,343,310
Total		$565,833,730		

Small Primary Service Rate Comparison
Ameren Missouri
Weather Normalized-12 months ending March 2014
Growth to December 2014

Billing Components		Rate	Units	$					
					Target	$249,551,313			
					Increase	0.09817			
						Proposed Rate			
Summer (June - September)									
Customer Charge	Per Month	$299.60	2,581	$773,221		$328.50	$847,807	299.60	$773,221	-$74,586
Customer Charge TOD	Per Month	$319.10	80	$25,440		$349.68	$27,894	350.43	$27,938	$44
Low Income Program Ch	Per Month	$0.00	2,661	$0		$0.00	$0	0.00	$0	
Energy Charge (¢ per kWh)										
First 150 kWh per KW		9.56 ¢	428,374,728	$40,761,424		10.50	$44,769,346	10.499	$44,763,037	-$6,309
Next 200 kWh per KW		7.20 ¢	518,519,003	$37,333,368		7.962	$41,066,705	7.907	$40,998,444	-$68,261
All over 350 kWh per KW		4.83 ¢	362,631,332	$17,515,093		5.30	$19,219,481	5.304	$19,234,578	$15,117
TOD On Peak Adjust. per Kwh		0.85 ¢	14,787,819	$125,528		0.93	$137,341	0.93	$137,850	$509
TOD Off Peak Adjust. per Kwh		-0.48 ¢	30,611,835	-$146,937		-0.53	-$162,243	-0.53	-$161,362	$881
Energy Efficiency per Kwh		0.09 ¢	1,307,525,062	$1,176,773		0.09	$1,176,773	0.09	$1,162,152	-$14,621
Opt Out EE per Kwh		-0.09 ¢	85,416,638	-$76,875		-0.09	-$76,875	-0.09	-$75,920	$955
Demand										
Per KW of Billing Demand		$3.82	2,904,959	$11,096,944		$4.20	$12,200,828	4.20	$12,188,348	-$14,480
Billing Kvars		35 ¢	539,541	$188,839		.38	$205,025	38.44	$207,378	$2,352
Rider B 34kv										
Per KW		114 ¢	325,931	-$371,561		-1.25	-$407,414	125.19	-$408,038	-$624
Rider B 138kv										
Per KW		135 ¢	2,354	-$3,178		-1.48	-$3,484	148.25	-$3,490	-$6
Winter (October - May)										
Customer Charge	Per Month	$299.60	5,179	$1,551,647		$328.50	$1,701,322	329.01	$1,703,975	$2,653
Customer Charge TOD	Per Month	$319.10	155	$49,576		$349.68	$54,358	350.43	$54,443	$85
Low Income Program Ch	Per Month	$0.00	5,334	$0		$0.00	$0	0.00	$0	
Energy Charge (¢ per kWh)										
First 150 kWh per KW		6.02 ¢	705,869,897	$42,494,572		6.61	$46,659,322	6.611	$46,666,331	$7,009
Next 200 kWh per KW		4.47 ¢	869,383,383	$38,860,543		4.91	$42,685,742	4.909	$42,675,544	-$10,198
All over 350 kWh per KW		3.50 ¢	623,212,439	$21,812,435		3.84	$23,931,358	3.844	$23,953,797	$22,439
Seasonal Energy Charge		3.50 ¢	175,041,509	$6,126,453		3.84	$6,721,594	3.844	$6,727,896	$6,302
TOD On Peak Adjust. per Kwh		0.32 ¢	24,528,233	$78,490		0.35	$85,849	0.35	$86,196	$347
TOD Off Peak Adjust. per Kwh		-0.17 ¢	51,839,857	-$88,128		-0.19	-$98,496	-0.19	-$96,779	$1,716
Energy Efficiency per Kwh		0.06 ¢	2,373,507,227	$1,424,104		0.05	$1,186,754	0.05	$1,276,821	$90,067
Opt Out EE per Kwh		-0.06 ¢	166,671,896	-$100,003		-0.05	-$83,336	-0.05	-$89,660	-$6,325
Demand										
Per KW of Billing Demand		$1.39	5,321,815	$7,397,322		$1.53	$8,142,376	1.53	$8,123,529	-$18,847
Billing Kvars		35 ¢	837,881	$293,258		.38	$318,395	38.44	$322,048	$3,653
Rider B 34kv										
Per KW		114 ¢	610,802	-$696,315		-1.25	-$763,503	125.19	-$764,673	-$1,170
Rider B 138kv										
Per KW		135 ¢	4,180	-$5,642		-1.48	-$6,186	148.25	-$6,196	-$11
			3,681,032,289	$227,596,391			$249,536,714		$249,475,405	
						Variance	-$14,599		-$75,908	

EE	Pre-MEEIA
Summer	$1,099,898
Winter	$1,324,101
	$2,423,999

	KWH	Allocation for Seasons		Total Pre-MEEIA
				$2,273,392
Summer	1,222,108,424	$107,599,416	0.478	$1,086,232
Winter	2,205,835,531	$117,597,091	0.522	$1,187,160
Total		$225,196,507		

Rate	LGS Summer	
Customer Demand	1,000	kW
LGS Summer Non-EE Revenues	$ 304,466,325	
% Energy, Cost of Service Study	31.7%	
Non-EE Energy Revenues, COS	$ 96,567,369	
Total Billing kWh	2,931,435,606	kWh
Cost of Service Energy Rate	$ 0.03294	/kWh
Proposed Billing Demand Rate (BDR)	$ 5.07	/kW
% Demand, Cost of Service Study	66.1%	
Non-EE Demand Revenues, COS	$ 201,178,183	
Total Billing kW	8,516,045	
Full Cost Demand Rate (FCDR)	$ 23.62	/kW

Hours of Use	kWh	Load Factor	Proposed Energy Rate	Cost of Service Energy Rate	Demand Portion of Energy Rate	Billed Demand Cost from Energy Rate	Effective Demand Rate from Energy Rate	Total Demand Rate
		(%)	($/kWh)	($/kWh)	($/kWh)	($)	($/kW)	($/kW)
(1)	(2)	(3)	(4) Ex SWC-7	(5)	(6) (4) - (5)	(7)	(8) (7) / kW Demand	(9) (8) + BDR
1	1,000	0.1%	$ 0.10860	$ 0.03294	$ 0.07566	$ 76	$ 0.08	$ 5.15
72	72,000	10.0%	$ 0.10860	$ 0.03294	$ 0.07566	$ 5,447	$ 5.45	$ 10.52
144	144,000	20.0%	$ 0.10860	$ 0.03294	$ 0.07566	$ 10,895	$ 10.89	$ 15.96
150	150,000	20.8%	$ 0.10860	$ 0.03294	$ 0.07566	$ 11,349	$ 11.35	$ 16.42
216	216,000	30.0%	$ 0.08170	$ 0.03294	$ 0.04876	$ 14,567	$ 14.57	$ 19.64
288	288,000	40.0%	$ 0.08170	$ 0.03294	$ 0.04876	$ 18,077	$ 18.08	$ 23.15
297	297,000	41.3%	$ 0.08170	$ 0.03294	$ 0.04876	$ 18,516	$ 18.52	$ 23.59
298	298,000	41.4%	$ 0.08170	$ 0.03294	$ 0.04876	$ 18,565	$ 18.56	$ 23.63
350	350,000	48.6%	$ 0.08170	$ 0.03294	$ 0.04876	$ 21,100	$ 21.10	$ 26.17
360	360,000	50.0%	$ 0.05490	$ 0.03294	$ 0.02196	$ 21,320	$ 21.32	$ 26.39
432	432,000	60.0%	$ 0.05490	$ 0.03294	$ 0.02196	$ 22,901	$ 22.90	$ 27.97
504	504,000	70.0%	$ 0.05490	$ 0.03294	$ 0.02196	$ 24,482	$ 24.48	$ 29.55
576	576,000	80.0%	$ 0.05490	$ 0.03294	$ 0.02196	$ 26,063	$ 26.06	$ 31.13
648	648,000	90.0%	$ 0.05490	$ 0.03294	$ 0.02196	$ 27,644	$ 27.64	$ 32.71
720	720,000	100.0%	$ 0.05490	$ 0.03294	$ 0.02196	$ 29,225	$ 29.22	$ 34.29

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company, d/b/a Ameren Missouri's Tariff to Increase Its Revenues for Electric Service	)))	Case No. ER-2014-0258

AFFIDAVIT OF STEVE W. CHRISS

STATE OF ARKANSAS)
) ss:
COUNTY OF BENTON)

Steve W. Chriss, being first duly sworn, deposes and states that:

1. He is employed by Wal-Mart Stores, Inc., as Senior Manager, Energy Regulatory Analysis in Bentonville, Arkansas;

2. He is the witness sponsoring the accompanying testimony entitled Direct Testimony Of Steve W. Chriss;

3. Said testimony was prepared by him and under his direction and supervision;

4. If inquiries were made as to the facts and schedules in said testimony, he would respond as therein set forth; and

5. The aforesaid testimony and testimony and schedules are true and correct to the best of his knowledge, information and belief.

Steve W. Chriss

Subscriber and sworn to or affirmed before me this 19th day of December, 2014, by Steve W. Chriss.

Terri D. Hall
Notary Public

My Commission No: _____

My Commission Expires: 9-28-15

(SEAL)

TERRI D. HALL
Benton County
My Commission Expires
September 28, 2015