

Exhibit No. 750

Exhibit No:
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/ Rate Design
Witness: Steve W. Chriss
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MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. ER-2021-0240

DIRECT TESTIMONY AND EXHIBITS OF

STEVE W. CHRISS

ON BEHALF OF

MIDWEST ENERGY CONSUMERS GROUP

SEPTEMBER 17, 2021

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**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company d/b/a)
Ameren Missouri's Tariffs to Decrease Its) File No. ER-2021-0240
Revenues for Electric Service.)

AFFIDAVIT OF STEVE W. CHRISS

STATE OF MISSOURI)
COUNTY OF COLE)

ss.

COMES NOW STEVE W. CHRISS and on his oath declares that he is of sound mind and lawful age; that he prepared the attached Direct Testimony; and that the same is true and correct according to his best knowledge and belief, under penalty of perjury.

Further the Affiant sayeth not.

/s/ Steve W. Chriss
Steve W. Chriss

1 **Introduction**

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

3 A. My name is Steve W. Chriss. My business address is 2608 SE J St., Bentonville, AR
4 72716-0550. I am employed by Walmart Inc. ("Walmart") as Director, Energy
5 Services.

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

7 A. I am testifying on behalf of Midwest Energy Consumers Group ("MECG"), which is an
8 incorporated association representing the interests of large commercial and
9 industrial users of electricity. MECG members take electric service from Union
10 Electric Company d/b/a Ameren Missouri ("Ameren" or "the Company") primarily on
11 Service Classification No. 3(M) Large General Service Rate ("LGS"), Service
12 Classification No. 4(M) Small Primary Service Rate ("SP"), and Service Classification
13 No. 11(M) Large Primary Service Rate ("LP").

14 **Q. PLEASE DESCRIBE YOUR EDUCATION AND EXPERIENCE.**

15 A. In 2001, I completed a Master of Science in Agricultural Economics at Louisiana State
16 University. From 2001 to 2003, I was an Analyst and later a Senior Analyst at the
17 Houston office of Econ One Research, Inc., a Los Angeles-based consulting firm. My
18 duties included research and analysis on domestic and international energy and
19 regulatory issues. From 2003 to 2007, I was an Economist and later a Senior Utility
20 Analyst at the Public Utility Commission of Oregon in Salem, Oregon. My duties
21 included appearing as a witness for PUC Staff in electric, natural gas, and

1 telecommunications dockets. I joined the energy department at Walmart in July
2 2007 as Manager, State Rate Proceedings. I was promoted to Senior Manager,
3 Energy Regulatory Analysis, in June 2011. I was promoted to my current position in
4 October, 2016 and the position was re-titled in October, 2018. My Witness
5 Qualifications Statement is attached as Exhibit SWC-1.

6 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE MISSOURI PUBLIC**
7 **SERVICE COMMISSION ("COMMISSION")?**

8 A. Yes. I submitted testimony in Docket Nos. ER-2010-0036, EO-2012-0009, EC-2014-
9 0224, ER-2014-0258, ER-2016-0023, EA-2016-0208, ER-2016-0179, ER-2016-0358,
10 ET-2018-0063, ER-2018-0146, EM-2018-0012, ER-2018-0145, ER-2019-0335, and ER-
11 2019-0374.

12 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE OTHER STATE**
13 **REGULATORY COMMISSIONS?**

14 A. Yes. I have submitted testimony in over 240 proceedings before 40 other utility
15 regulatory commissions. I have also submitted testimony before legislative
16 committees in Kansas, Missouri, North Carolina, and South Carolina. My testimony
17 has addressed topics including, but not limited to, cost of service and rate design,
18 return on equity, revenue requirements, ratemaking policy, large customer
19 renewable programs, qualifying facility rates, telecommunications deregulation,
20 resource certification, energy efficiency/demand side management, fuel cost
21 adjustment mechanisms, decoupling, and the collection of cash earnings on

1 construction work in progress.

2 **Q. ARE YOU SPONSORING EXHIBITS IN YOUR TESTIMONY?**

3 A. Yes. I am sponsoring the exhibits listed in the Table of Contents.

4 **Q. DO MECG'S MEMBERS HAVE A SIGNIFICANT IMPACT ON MISSOURI'S ECONOMY?**

5 A. Yes. For example, as shown on Walmart's website, Walmart operates 156 retail
6 units and four distribution centers and employs over 43,000 associates in Missouri.
7 In fiscal year ending 2021, Walmart purchased \$6.9 billion worth of goods and
8 services from Missouri-based suppliers, supporting over 68,000 supplier jobs.¹

9
10 **Purpose of Testimony and Summary of Recommendations**

11 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

12 A. The purpose of my testimony is to provide MECG's response to class cost of service
13 and rate design issues in Ameren's rate case filing and to provide recommendations
14 to assist the Commission in its thorough and careful consideration of the customer
15 impact of the Company's proposed rate increase.

16 **Q. PLEASE SUMMARIZE MECG'S RECOMMENDATIONS TO THE COMMISSION.**

17 A. MECG's recommendations to the Commission are as follows:

18 1) MECG supports the allocation of production plant fixed costs using the Company's
19 proposed Average & Excess ("A&E") allocator based on the four non-coincident

¹ <http://corporate.walmart.com/our-story/locations/united-states#/united-states/missouri>

1 peaks ("NCP") for each customer class (together, "A&E 4NCP") allocator as modified
2 slightly to comply with Section 393.1620.1(1) RSMo.

3 2) MECG does not oppose the remainder of the Company's proposed cost of service
4 study. To the extent that alternative cost of service models or modifications to the
5 Company's model are proposed by other parties, MECG reserves the right to address
6 such changes in rebuttal testimony.

7 3) Due to the level of the Company's proposed increase, if the Commission were to
8 award Ameren its proposed revenue requirement increase, the Commission should
9 reject the Company's revenue allocation proposal and assign an equal percentage
10 increase to all classes.

11 4) If the Commission awards a revenue requirement increase that is lower than that
12 proposed by the Company, MECG recommends the Commission take significant
13 steps to address the above cost rates paid by Small General Service ("SGS"), LGS, SP,
14 and LPS. Specifically, MECG recommends that the Commission allocate the revenue
15 increase using the following steps:

16 a. Apply half of the difference between the approved revenue requirement and
17 Ameren's proposed revenue requirement as a reduction to SGS, LGS, SP, LPS,
18 and Company Owned Lighting based on the proportional contribution of
19 each class to the overall revenue neutral shift to cost of service from the
20 Company's proposed cost of service study; and

21 b. Apply the remaining half of the difference between the approved revenue

1 requirement and Ameren's proposed revenue requirement on an equal
2 percentage basis to all customer classes.

3 5) The Commission should require the Company to show all components of bill
4 calculation of Electronic Data Interchange ("EDI") bills.

5 6) For the purposes of this docket, at the Company's proposed revenue requirement
6 for the LGS and SP classes, MECG recommends that the Commission:

7 a. Accept Ameren's proposed customer charges and on-peak and off-peak
8 adjusters for both LGS and SP, and Ameren's proposed Rider B credits and
9 reactive charge for SP;

10 b. Increase the summer and winter demand charges for LGS and SP by three
11 times the percent class increases; and

12 c. Apply the remaining proposed increase on an equal percentage basis to the
13 summer and winter energy charges.

14 7) If the Commission awards an increase for these classes that is lower than that
15 proposed by the Company, then the Commission can then take larger steps to
16 address the over-recovery of demand-related costs through energy charges and
17 associated intra-class subsidies. Specifically, the Commission should set the demand
18 charges per MECG's recommendation above and apply the approved reduction in
19 the class revenue requirement by reducing all base rate energy charges on an equal
20 percentage basis.

1 Q. DOES THE FACT THAT YOU MAY NOT ADDRESS AN ISSUE OR POSITION
2 ADVOCATED BY THE COMPANY INDICATE MECG'S SUPPORT?

3 A. No. The fact that an issue is not addressed herein or in related filings should not be
4 construed as an endorsement of, agreement with, or consent to any filed position.
5

6 **General Concerns Regarding Ameren's Proposed Revenue Requirement**

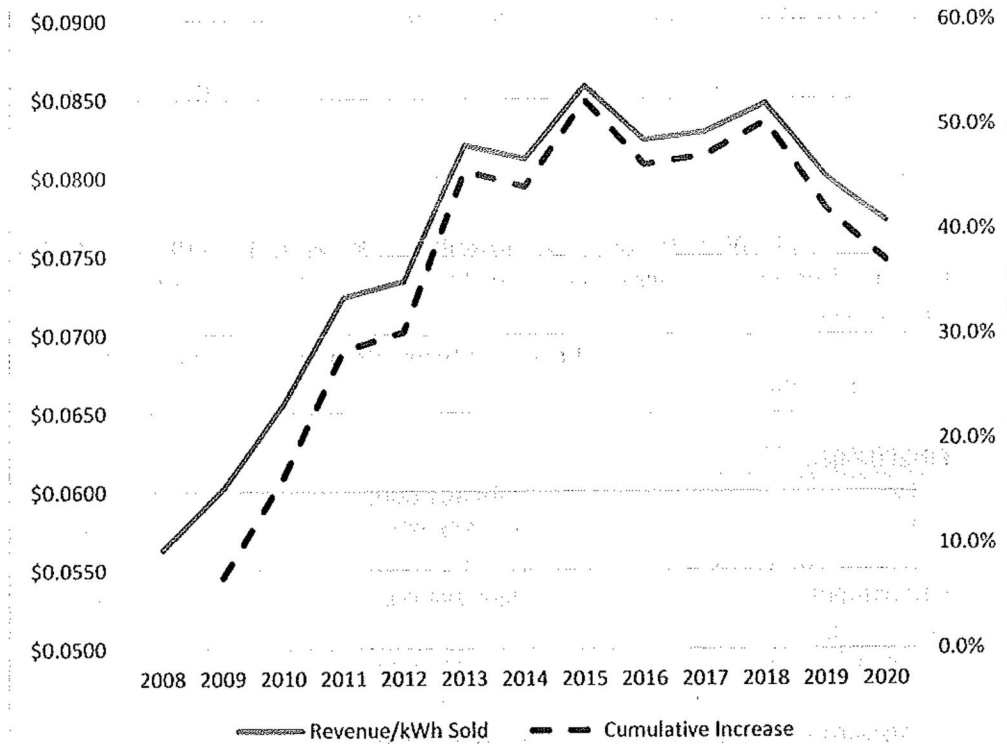
7 Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED REVENUE
8 REQUIREMENT INCREASE IN THIS DOCKET?

9 A. My understanding is that Ameren has requested a revenue increase in this docket of
10 approximately \$299 million, or 11.97 percent, based on a test year ending December
11 31, 2020, with certain pro forma adjustments to include known and measurable
12 items through September 30, 2021. See Counsel Filing Letter, page 1 and Schedule 1
13 – Min. Filing Reqmt. 3(B)1.

14 Q. HAVE THE COMPANY'S RATES SIGNIFICANTLY INCREASED FOR LARGE USERS OVER
15 THE LAST 13 YEARS?

16 A. Yes. For example, analysis for FERC Form 1 data shows that between 2008 and
17 2020, and not inclusive of the increases proposed in the instant docket, Ameren's
18 reported revenue per kWh sold to LGS customers has increased from \$0.0563/kWh
19 to \$0.0772/kWh, an increase of 37.1 percent. However, as recently as 2018,
20 revenue per kWh sold to LGS customers was 50.3 percent higher than 2008, with
21 relief brought about primarily by the Tax Cuts and Jobs Act. Figure 1 and Exhibit

1 SWC-2 show the increase in revenue per kWh sold (left axis) and the cumulative
2 percent increase over the period (right axis).



3
4 **Figure 1. FERC Form 1 Reported LGS Revenue Per kWh Sold and Cumulative Percent Increase, 2008 -**
5 **2018. Source: Exhibit SWC-2**
6

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

9 **A. Yes. As I will discuss in more detail below, LGS and SP customers have paid rates in**
10 **excess of cost of service for the time period shown in Figure 1.**

1 Q. PLEASE EXPLAIN.

2 A. An examination of the revenue neutral² results for Ameren rate cases filed since
 3 2007 show that rates for the LGS and SP classes have been set well in excess of cost
 4 of service since the 2007 rate case.³ Table 1 summarizes the Company's final class
 5 cost of service study results in each rate case.

Table 1. 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
ER-2014-0258 (LGS & SP)	(\$68,705,063)	-8.54
ER-2016-0179 (LGS & SP)	(\$26,675,524)	-3.40
ER-2019-0335 (LGS & SP)	(\$84,130,291)	-10.44

Source: Direct Testimony of Steve W. Chriss, Table 1 and Schedule SWC-3 on behalf of The Midwest Energy Consumers Group, Case No. ER-2019-0335

6

7 Q. HAS AMEREN PROPOSED A REVENUE REQUIREMENT CHANGE FOR LGS AND SP
 8 CUSTOMERS THAT REFLECTS MOVEMENT TOWARDS THE COST TO SERVE THOSE
 9 CUSTOMERS?

10 A. No. Per Ameren's cost of service study results in this case, at the Company's

² 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, as determined prior to any rate change granted to the utility.

³ Since 2007, the LGS and SP classes have been treated together for purposes of conducting class cost of service studies.

1 proposed revenue requirement, the LGS and SP classes should receive a 1.4 percent
2 increase. Therefore, even if Ameren is granted the full proposed 11.93 percent rate
3 increase, Ameren's own cost of service study indicates that LGS and SP should
4 receive only a 1.4 percent rate increase. See Direct Testimony of Michael W.
5 Harding, page 5, Table 2. However, as I will discuss in more detail below, the
6 Company has proposed an 11.96 percent increase for LGS and an 11.98 percent
7 increase for SP. *Id.*, page 6, Table 3. As such, Ameren is proposing that LGS rates be
8 set approximately \$53.5 million above cost of service and that SP rates be set
9 approximately \$23.3 million above cost of service. In total, Ameren's proposal
10 would mean that LGS and SP customers together would pay rates that are almost
11 \$77 million per year above cost of service levels. See Exhibit SWC-3.

12 **Q. SHOULD THE COMMISSION CONSIDER THE IMPACT OF THE PROPOSALS IN THIS**
13 **DOCKET ON LGS AND SP CUSTOMERS IN SETTING THE CLASS REVENUE**
14 **REQUIREMENTS AND RATE DESIGNS IN THE IMMEDIATE PROCEEDING?**

15 **A.** Yes. Electricity represents a significant portion of operating costs for MECG
16 members. When rates increase, that increase in cost puts pressure on the other
17 expenses required by a business to operate. The Commission should consider the
18 impact on customers thoroughly and carefully in their examination of all facets of
19 this case, to ensure that any increase in Ameren's rates is only the minimum amount
20 necessary for the utility to provide adequate and reliable service to each customer
21 class.

1 **Cost of Service and Revenue Allocation**

2 **Q. GENERALLY, WHAT IS MECG'S POSITION ON SETTING RATES BASED ON THE**
3 **UTILITY'S COST OF SERVICE?**

4 **A.** MECG advocates that rates be set based on the utility's cost of service for each rate
5 class. This produces equitable rates that reflect cost causation, sends proper price
6 signals, and minimizes price distortions.

7
8 ***Production Plant Cost Allocation***

9 **Q. WHAT IS YOUR UNDERSTANDING OF THE PURPOSE OF PRODUCTION PLANT FIXED**
10 **COST ALLOCATION?**

11 **A.** Production plant cost allocation is the process of allocating to each customer class the
12 fixed costs of a utility's generation assets. Fixed costs are defined as costs that do not
13 vary with the level of output and must be paid even if there is no output.⁴

14 **Q. DO A UTILITY'S FIXED PRODUCTION PLANT COSTS CHANGE WITH CHANGES IN THE**
15 **AMOUNT OF ELECTRICITY GENERATED?**

16 **A.** No. The utility's fixed production plant costs do not change with changes in the amount
17 of electricity generated. For example, if a generating unit is not dispatched and
18 produces no energy, the fixed costs are not avoided by the utility or customers.
19 Generation units can be built and operated for different reasons, such as lower fuel
20 costs, or reliability, but the way in which a generation unit is operated does not change

⁴ Pindyck, Robert S. and Daniel L. Rubinfeld, "Microeconomics", 5th ed., 2001, page 206.

1 the fact that the fixed costs are, in fact, fixed, and should be treated as such in the
2 production capacity cost allocation.

3 **Q. IS IT YOUR UNDERSTANDING THAT PRODUCTION PLANT CAPACITY IS SIZED TO MEET**
4 **THE MAXIMUM DEMAND IMPOSED ON THE SYSTEM BY THE COMPANY'S**
5 **CUSTOMERS?**

6 A. Yes. It is my understanding that the timing and size of a utility's production plant
7 capacity additions are generally made to meet the maximum demand placed on the
8 utility's system by all customer classes, also known as its coincident peak ("CP"). All of a
9 utility's generation units are needed to meet that demand, and removing any of the
10 units from that stack will limit the utility's ability to do so.

11 **Q. WHY IS IT IMPORTANT FOR THE ALLOCATION OF PRODUCTION PLANT COST TO**
12 **RECOGNIZE THAT PRODUCTION CAPACITY IS DESIGNED TO MEET SYSTEM PEAK?**

13 A. Basing the allocation of production plant fixed costs on the utility's system peak ensures
14 that the resulting rates reflect cost causation and minimizes cost responsibility shifts
15 between rate classes. Allocation of fixed production plant costs on a variable, or
16 energy, basis can introduce shifts in cost responsibility from lower load factor classes to
17 higher load factor classes. Under an energy allocator, two customer classes can have
18 the same contribution to system peak demand in the test year and cause the Company
19 to incur the same amount of fixed cost to meet that demand, but because one class
20 uses more kWh than the other, that class will pay more of the demand cost than the
21 class that uses fewer kWh. Additionally, use of an energy allocator implies that the
22 generation plant to which that allocator is applied has no fixed cost, which is plainly not

1 the case.

2 **Q. WHAT IS YOUR UNDERSTANDING OF CHANGES IN MISSOURI LAW REGARDING**
3 **PRODUCTION PLANT COST ALLOCATION?**

4 A. While I am not an attorney, my understanding is that Section 393.1620.2 RSMo
5 states:

6 "In determining the allocation of an electrical corporation's total revenue
7 requirement in a general rate case, the commission shall only consider class cost of
8 service study results that allocate the electrical corporation's production plant costs
9 from nuclear and fossil generating units using the average and excess method or one
10 of the methods of assignment or allocation contained within the National
11 Association of Regulatory Utility Commissioners 1992 manual or subsequent
12 manual."

13 Additionally, Section 393.1620.1(1) RSMo defines "Average and excess method" as:

14 "...a method for allocation of production plant costs using factors that consider the
15 classes' average demands and excess demands, determined by subtracting the
16 average demands from the noncoincident peak demands, for the four months with
17 the highest system peak loads. The production plant costs are allocated using the
18 class average and excess demands proportionally based on the system load factor,
19 where the system load factor determines the percentage of production plant costs
20 allocated using the average demands, and the remainder of production plant costs
21 are allocated using the excess demands;"

22 **Q. ARE YOU GENERALLY FAMILIAR WITH THE PRODUCTION COST ALLOCATORS**
23 **INCLUDED IN THE ELECTRIC UTILITY COST ALLOCATION MANUAL PUBLISHED BY**
24 **THE NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS IN**
25 **JANUARY, 1992 ("NARUC MANUAL")?**

26 A. Yes. The NARUC Manual describes 13 production plant allocation methods, as
27 summarized below. In examining the methods, particularly those in which
28 generation resources are assigned operating roles as baseload or peaking resources,

1 it is important to recognize that the NARUC Manual was published in 1992, several
2 years before the Federal Energy Regulatory Commission issued Order 888 in 1996
3 and Order 2000 in 1999, which enabled the creation of Independent System
4 Operators and Regional Transmission Organizations. The centralized operation of
5 these organizations across broader regions renders a utility-specific assignment of
6 generation resources to roles, and associated production plant cost allocators, less
7 relevant now than they would have been when the NARUC Manual was published.

8 1) Peak Demand Methods

- 9 a. Single Coincident Peak Method ("1CP"), which allocates production plant
10 costs according to customer class contributions to the utility's highest
11 measured one-hour demand in the test year. See NARUC Manual, page 44.
- 12 b. Summer and Winter Peak Method, which, if the summer and winter peaks
13 are close in value, allocates production plant costs according to the average
14 of customer class contributions to those seasonal peaks. *Id.*, page 45.
- 15 c. The Sum of the Twelve Monthly Coincident Peak Method ("12CP"), which, if
16 monthly peaks "lie within a narrow range", allocates production plant costs
17 according to the average of customer class contributions to the CP in each
18 month of the year. *Id.*, page 46.
- 19 d. Multiple Coincident Peak Method, which allocates production plant costs
20 according to the average of customer class contributions to more than one
21 peak, which can represent more than one of the monthly CP, or more than

1 one specified hour across the year, even within a month. *Id.* In my
2 experience, in fully vertically integrated jurisdictions, this methodology uses
3 one or more of the monthly CP, typically focused on the traditional four
4 summer peak months. More generally, the NARUC Manual suggests
5 thresholds for inclusion of five and ten percent of the maximum system peak.

6 e. All Peak Hours Approach, which allocates production plant costs according to
7 the average of customer class contributions to all defined peak hours. *Id.*,
8 page 47.

9 2) Energy Weighting Methods

10 a. A&E, which I will discuss in more detail below, and is suggested by the
11 NARUC Manual as an appropriate method to use if the Commission
12 determines it appropriate to include average demand, which is essentially
13 energy, in production plant cost allocation. *Id.*, page 49.

14 b. Equivalent Peaker Method, which is based on generation planning and
15 designates generation units as either demand (peaking) or energy (baseload),
16 or some mix thereof, to determine the percent of production plant costs that
17 are to be allocated to the customer classes based on demand and energy.
18 The NARUC Manual notes that this method ignores the relative fuel costs and
19 savings that can occur with different generation types. *Id.*, page 52 to page
20 55.

21 c. Base and Peak Method, which is similar to the Equivalent Peaker Method,

1 but assigns the energy portion of production plant cost based on class
2 contributions to on-peak energy usage. *Id.*, page 55 to page 56.

3 d. Judgmental Energy Weightings, which is essentially a catch all for the Peak
4 and Average Demand methodology, which the Commission has previously
5 rejected as it “has the effect of double counting average demand,”⁵ and the
6 1/12CP and 1/13th Average Demand methodology, which in my experience has
7 only been used at the Florida Public Service Commission. *Id.*, page 57.

8 3) Time-Differentiated Embedded Cost of Service Methods

9 a. Production Stacking Methods, which, similarly to the Equivalent Peaker
10 Method, designate certain generation resources as baseload to be allocated
11 on an energy basis, with remaining generation to be allocated on a demand
12 basis. *Id.*, page 59 to page 60.

13 b. Base-Intermediate-Peak Method, which assigns generation resources to peak
14 hours, secondary peak, or intermediate, hours, and baseload hours. Costs
15 for peak resources would then be allocated per a CP allocator, for
16 intermediate resources would be allocated per class contributions to the
17 intermediate period, and for baseload resources would be allocated per an
18 energy allocator. *Id.*, page 60 to page 62.

19 c. Loss of Load Probability (“LOLP”) Production Cost Method, in which hourly

⁵ See File No. ER-2014-0258, Report and Order, April 29, 2015, page 71.

1 LOLPs are calculated and the hours grouped into on-peak, off-peak, and
2 shoulder periods. Production plant costs are allocated to rating periods
3 according to the relative proportions of LOLPs occurring in each, and then
4 allocated to classes using the allocators determined to be appropriate for
5 each rating period. *Id.*, page 62.

6 d. Probability of Dispatch Method, which analyzes the hourly load curve for the
7 utility and the generation resources normally used to serve each hourly load.
8 The annual revenue requirement of each generation resource is then divided
9 by the number of hours it operates in the year to create a “per hour cost.”
10 The per hour costs are then allocated to classes according to class energy
11 usage in each hour. *Id.*

12 **Q. WHAT IS YOUR UNDERSTANDING OF THE PRODUCTION COST ALLOCATOR**
13 **PROPOSED BY AMEREN IN THIS DOCKET?**

14 A. My understanding is that Ameren proposes an A&E allocator based on the four non-
15 coincident peaks (“NCP”) for each customer class, or A&E 4NCP. The Company
16 proposes to use the four NCP for each customer class regardless of when during the
17 year those NCP occurred, and those four NCP are averaged in the calculation of the
18 allocator. Additionally, the Company proposes to manually adjust the Lighting
19 Classes to recognize that the classes tend to peak during off-peak winter periods.
20 See Direct Testimony of Thomas Hickman, page 14, line 18 to page 15, line 6.

1 Q. WHAT IS YOUR UNDERSTANDING OF AN A&E ALLOCATOR?

2 A. An A&E allocator is an allocator that recognizes the contribution of each class to the
3 utility's average demand, which is total annual kWh divided by 8,760 hours in a
4 typical year, as well as the relative peak demand of each class. As such, A&E is a
5 methodology often used when a Commission determines that production plants are
6 used to provide energy as well as peak demand. However, the A&E allocator differs
7 from other allocators that have an energy component in that it does not double
8 count the energy portion of the allocator, as is the case with the Peak and Average
9 allocator as discussed above. Additionally, the A&E allocator does not rely on fixed
10 subjective resource weightings that are incompatible with the flexible nature of
11 regional transmission organization dispatch of generation, as is the case with the
12 Base-Intermediate-Peak allocator. As such, even with its use of energy as part of the
13 allocator, the A&E allocator is, in my experience, an objective, transparent, and
14 reasonable production plant cost allocator.

15 Mechanically, the CP or NCP peak demand value for each class – in Ameren's
16 case, 4NCP – is subdivided into average demand and excess demand. The average
17 demand, or energy portion for each class, is weighted by the system load factor.
18 The excess demand portion, which is the difference between the average demand
19 and the peak demand for each class, is weighted by 1 minus the system load factor.
20 As a result, as system load factor increases and the system gets less peaky, the
21 overall weighting of the average demand portion of the allocator increases, and

1 conversely, as the system load factor decreases and the system gets more peaky, the
2 overall weighting of the excess demand portion of the allocator increases. At a
3 theoretical maximum of 100 percent system load factor, the A&E allocator is
4 essentially an energy allocator.

5 **Q. HAVE YOU EXAMINED THE COMPANY'S PROPOSED A&E 4NCP ALLOCATOR?**

6 A. Yes. Upon examination of the calculation of Ameren's proposed allocator, it appears
7 that allocator differs slightly from that specified in Section 393.1620.1(1) RSMo, in
8 that the months used for the 4NCP in the A&E 4NCP are "determined...for the *four*
9 *months with the highest system peak loads.*" As shown in Exhibit SWC-4 row (9), the
10 four months with the highest system peak loads are February, June, July, and
11 August, but in rows (10) through (14) the class NCPs used for the calculation of the
12 allocator are, depending on the class, from January, March, April, May, June, July,
13 August, and September.

14 **Q. HAVE YOU CALCULATED THE 4NCP A&E PER THE LANGUAGE IN SECTION**
15 **393.1620.1(1) RSMo?**

16 A. Yes, as shown in Exhibit SWC-5. This calculation uses the class NCPs from the four
17 months with the highest system peak loads (February, June, July, and August), and
18 also accepts Ameren's lighting proposal and the Company's use of a single CP for the
19 calculation of the system load factor. As shown in Table 2, the difference in
20 outcomes is relatively small, with the largest changes being an addition of 0.24
21 percent to Residential and a reduction of 0.25 percent to LPS.

Table 2. Comparison of Ameren Proposed and Section 393.1620.1(1) RSMo A&E 4NCP Results.

Customer Class	Ameren Proposed A&E 4NCP (%)	Per 393.1620.1(1) A&E 4NCP (%)	Difference (%)
Residential	52.53	52.76	+0.24
SGS	10.93	10.89	-0.03
LGS/SP	28.71	28.77	+0.05
LPS	7.50	7.24	-0.25
Lighting	0.34	0.33	-0.01

Source: Exhibit SWC-5

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2 **Q. HAVE YOU CALCULATED ALLOCATORS FOR OTHER PRODUCTION PLANT COST**
 3 **ALLOCATION METHODS INCLUDED IN THE NARUC MANUAL THAT MECG BELIEVES**
 4 **ARE ALSO REASONABLE?**

5 **A.** Yes. Based on the discussions above regarding the nature of production plant costs
 6 and allocators included in the NARUC Manual and an examination of Ameren’s
 7 system peaks from their proposed test year data, it would be reasonable to allocate
 8 production plant costs on a 1CP basis or multiple CP basis at either five or ten
 9 percent of maximum system peak.

10 **Q. BASED ON YOUR ANALYSIS, HOW MANY CPS SHOULD BE INCLUDED IN THE TWO**
 11 **MULTIPLE CP ALLOCATORS?**

12 **A.** Based on my analysis of Ameren’s monthly peaks for the test year, a multiple CP
 13 production plant cost allocator should use a 2CP based on the system peaks in July
 14 and August at the five percent of maximum system peak level and a 3CP based on
 15 the system peaks in June, July, and August at the 10 percent of maximum system
 16 peak level. See Figure 2.

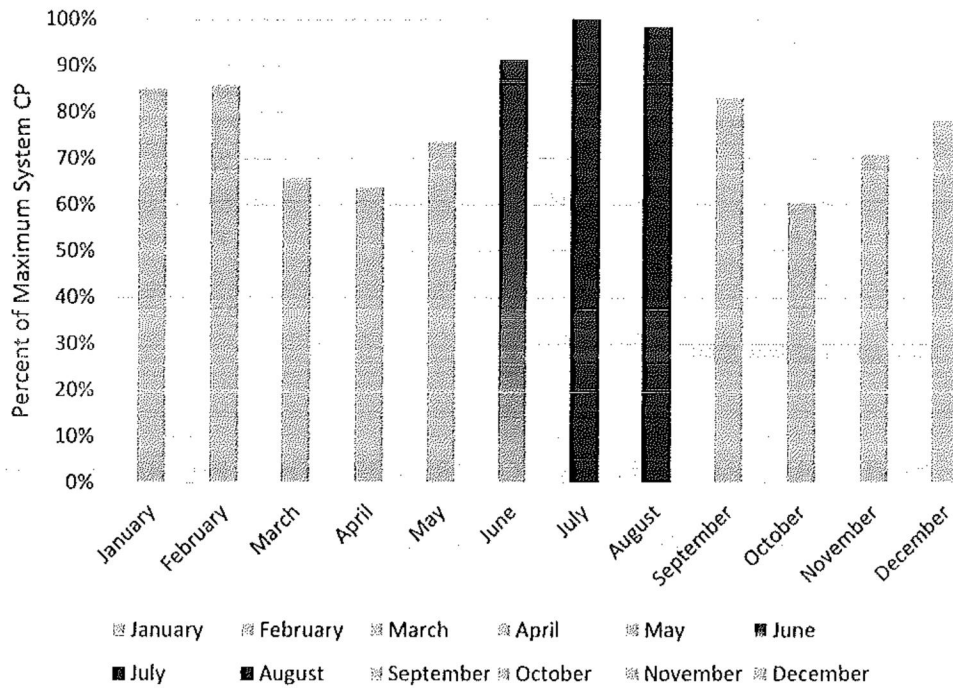


Figure 2. Ameren Monthly System CP as a Percentage of Maximum System CP. Source: Exhibit SWC-6

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Q. WHAT ARE THE RESULTING REASONABLE CP-BASED ALLOCATORS BASED ON AMEREN'S PROPOSED TEST YEAR DATA?

A. The resulting reasonable CP-based allocators are shown in Table 3 along with the Ameren Proposed and Section 393.1620.1(1) 4NCP allocators for comparison purposes. One notable difference between the CP-based allocators and the A&E allocators is that a portion of production plant cost is allocated to Lighting by the A&E allocators.

Table 3. Comparison of CP-Based Allocators with Ameren Proposed and Section 393.1620.1(1) A&E 4NCP Results.

Customer Class	1CP (%)	2CP @ 5% of Max (%)	3CP @ 10% of Max (%)	Per Section 393.1620.1(1) A&E 4NCP (%)	Ameren Proposed A&E 4NCP (%)
Residential	53.34	53.36	53.08	52.76	52.53
SGS	10.86	10.85	10.79	10.89	10.93
LGS/SP	28.56	28.36	28.52	28.77	28.71
LPS	7.23	7.42	7.61	7.24	7.50
Lighting	0.00	0.00	0.00	0.33	0.34

Sources: Exhibits SWC-5 and SWC-6

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Q. WHAT IS MECG'S RECOMMENDATION TO THE COMMISSION ON THIS ISSUE?

3

A. For the purposes of this docket, MECG supports the allocation of production plant cost using the Company's proposed A&E 4NCP allocator as modified slightly to comply with Section 393.1620.1(1) RSMo. MECG believes that the A&E 4NCP methodology is reasonable, and for commercial and industrial customers, the results of the Company's proposed allocator are generally similar to the reasonable CP-based allocators calculated above.

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Revenue Allocation

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

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A. The Company represents this relationship in its cost of service study results through the use of class-specific rates of return. See Schedule TH-D1. 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

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1 rate of return. An RRI greater than 1.0 means that the rate class is paying rates in
2 excess of the costs incurred to serve that class, and an RRI less than 1.0 means that
3 the rate class is paying rates less than the costs incurred to serve that class. As such,
4 those rate classes with an RRI greater than 1.0 shoulder some of the revenue
5 responsibility for the classes with an RRI less than 1.0.

6 **Q. HAVE YOU CALCULATED A RRI FOR EACH CUSTOMER CLASS BASED ON AMEREN'S**
7 **COST OF SERVICE RESULTS? ⁶**

8 **A.** Yes, as shown in Table 4 below.

Table 4. Rate of Return Index, Ameren Proposed Cost of Service Study Results.

Customer Class	Rate of Return (%)	RRI
Residential	3.10	0.65
Small General Service	5.15	1.08
Large General Service/Small Primary Service	7.35	1.54
Large Primary Service	7.70	1.62
Company Owned Lighting	9.02	1.89
Customer Owned Lighting	-4.57	(0.96)

Sources: Exhibit SWC-7 and Schedule TH-D1

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10 **Q. DO THE RATES FOR THE LGS AND SP CLASSES PROVIDE A RATE OF RETURN FOR**
11 **THE COMPANY IN EXCESS OF THEIR COST OF SERVICE LEVELS?**

12 **A.** Yes. As shown in Table 4, Ameren's cost of service results show that LGS and SP,
13 with an RRI of 1.54, provide a rate of return significantly above the cost of service

⁶ The slight modification to Ameren's A&E methodology discussed above would not materially change the rate of return index calculated for each class.

1 level for the class. Additionally, SGS, LPS, and Company Owned Lighting are also
 2 paying rates in excess of their respective cost of service levels, though SGS is much
 3 closer to cost of service than the other rate classes.

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

6 A. Yes. As shown in Table 5, LGS and SP rates have provided a rate of return above
 7 their cost of service levels in every rate case back to and including the Company's
 8 2007 rate case. In total, as shown in Table 1 earlier in this testimony, this has
 9 resulted in LGS and SP customers paying rates well in excess of the Company's cost
 10 to serve them since 2007.⁷ As such, rate relief is long overdue.

Table 5. 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
ER-2014-0258	7.57	4.44	1.71
ER-2016-0179	9.73	5.41	1.80
ER-2019-0335	11.35	7.37	1.54
Present Case	7.35	4.76	1.54

Source: Table 4, Direct Testimony of Steve W. Chriss, Table 3, on behalf of The Midwest Energy Consumers Group, Case No. ER-2019-0335

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⁷ Prior to 2007 Ameren had not had a general rate case for approximately 20 years.

1 Q. HAS THE COMPANY CALCULATED THE REVENUE NEUTRAL⁸ REVENUE CHANGES
2 REQUIRED TO BRING EACH CLASS TO COST OF SERVICE PER THE COMPANY'S COST
3 OF SERVICE STUDY IN THIS CASE?

4 A. Yes, as shown in Table 6.

Table 6. Revenue Neutral Shift Results, Ameren Proposed Cost of Service Study.

Customer Class	Revenue Neutral Shift	
	(\$000)	(%)
Residential	\$93,202	7.32
Small General Service	(\$4,258)	-1.55
Large General Service/Small Primary Service	(\$66,501)	-9.14
Large Primary Service	(\$17,855)	-9.47
Company Owned Lighting	(\$6,183)	-17.35
Customer Owned Lighting	\$1,594	55.96

Source: CCOS Spreadsheet, tab SCH 1

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6 For LGS and SP specifically, the revenue neutral change required is a reduction of
7 approximately \$66.5 million.

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

10 A. Yes. The Company states that equal rates of return (i.e., rates set at cost of service)
11 for all customer classes are an appropriate starting point for designing rates for
12 three reasons:

13 1) Equity and fairness to all electric customers;

⁸ Revenue neutral refers to the changes necessary to bring each class to cost of service assuming no overall change in the utility's revenues.

- 1 2) Encouraging cost-effective utilization of electricity; and
- 2 3) Competition, in that cost-based electric rates permit the Company to
- 3 compete with alternative fuels, co-generation, and other electric providers
- 4 for new commercial and industrial customers. See Direct Testimony of
- 5 Michael W. Harding, page 3, line 13 to page 4, line 10.

6 **Q. HAS THE COMPANY STATED IN THE PAST THE ROLE OF A REGULATOR RELATIVE TO**

7 **COST OF SERVICE IN THE SETTING OF RATES?**

8 A. Yes. In Case No. EC-2014-0224, Ameren witness Terry M. Jarrett states that “[t]he

9 regulator’s job is to make sure the rates are fair according to the cost of service for

10 each class.” See Case No. EC-2014-0224, Rebuttal Testimony of Terry M. Jarrett,

11 page 6, line 9 to line 10.

12 **Q. WHAT IS YOUR UNDERSTANDING OF AMEREN’S PROPOSED REVENUE ALLOCATION**

13 **IN THIS CASE?**

14 A. My understanding is that Ameren has put forth a two-step revenue allocation

15 proposal:

- 16 1) Increase or decrease current base retail revenues on a revenue neutral basis
- 17 for the two Lighting classes; and
- 18 2) Allocate the increase or decrease on an equal percentage basis after any
- 19 potential revenue neutral adjustments in step 1. See Direct Testimony of
- 20 Michael W. Harding, page 5, line 8 to page 6, line 2.

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1 **Q. IS THE COMPANY'S PROPOSAL EFFECTIVELY AN EQUAL PERCENTAGE INCREASE**
2 **FOR ALL CUSTOMER CLASSES WITH THE EXCEPTION OF CUSTOMER-OWNED**
3 **LIGHTING?**

4 A. Yes, Ameren's proposal is effectively an equal percent increase as all classes, with
5 the exception of Customer-Owned Lighting, are proposed to receive increases
6 between 11.80 percent and 11.99 percent, versus an average increase of 11.93
7 percent. See Direct Testimony of Michael W. Harding, page 6, Table 3.

8 **Q. HOW DOES THE COMPANY CHARACTERIZE ITS REVENUE ALLOCATION PROPOSAL?**

9 A. The Company characterizes its revenue allocation proposal as "a modest departure
10 from establishing class revenue requirements on the basis of equal class rates of
11 return as shown in its CCOSS." *Id.*, page 5, line 4 to line 5. This characterization is, at
12 best, a complete misrepresentation of the Company's proposal, which not only
13 departs from establishing class revenue requirements on the basis of equal class
14 rates of return, but charges headlong to move rates further from cost-based levels.
15 As an example, the Company actually proposes an above average increase for both
16 LGS and SP – 11.96 percent and 11.98 percent, respectively. This proposed increase
17 is greater than the 11.93 percent system average increase counter to their own
18 evidence that supports a 1.4 percent cost-based increase and moves LGS and SP
19 further from cost-based rates. *Id.*, page 6, Table 3.

1 Q. WHAT IS MECG'S RECOMMENDATION TO THE COMMISSION IF THE COMMISSION
2 WERE TO AWARD AMEREN ITS PROPOSED REVENUE REQUIREMENT INCREASE?

3 A. Due to the level of the Company's proposed increase, if the Commission were to
4 award Ameren its proposed revenue requirement increase, the Commission should
5 reject the Company's revenue allocation proposal and assign an equal percentage
6 increase to all classes.

7 Q. WHAT IS MECG'S RECOMMENDATION TO THE COMMISSION IF THE COMMISSION
8 AWARDS A REVENUE REQUIREMENT DECREASE LOWER THAN THAT PROPOSED BY
9 THE COMPANY?

10 A. If the Commission awards a revenue requirement increase lower than that proposed
11 by the Company, MECG recommends the Commission take significant steps to bring
12 the rates paid by SGS, LGS, SP, and LPS closer to their cost of service-based levels.
13 Specifically, MECG recommends that the Commission allocate the revenue increase
14 using the following steps:

- 15 1) Apply half of the difference between the approved revenue requirement and
16 Ameren's proposed revenue requirement as a reduction to SGS, LGS, SP, LPS,
17 and Company Owned Lighting based on the proportional contribution of
18 each class to the overall revenue neutral shift to cost of service from the
19 Company's proposed cost of service study; and