

Exhibit No.:
Issues: Cost of Service, Revenue Allocation,
and Rate Design
Witness: Maurice Brubaker
Type of Exhibit: Surrebuttal Testimony
Sponsoring Party: Missouri Industrial Energy Consumers
Case No.: ER-2021-0240
Date Testimony Prepared: November 5, 2021

**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 Adjust
its Revenues for Electric Service**

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)
) **Case No. ER-2021-0240**
)
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Surrebuttal Testimony and Schedules of

Maurice Brubaker

**on Cost of Service, Revenue
Allocation and Rate Design**

On behalf of

Missouri Industrial Energy Consumers

November 5, 2021



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STATE OF MISSOURI)
) SS
COUNTY OF ST. LOUIS)

Affidavit of Maurice Brubaker

Maurice Brubaker, being first duly sworn, on his oath states:

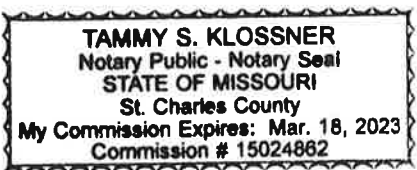
1. My name is Maurice Brubaker. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my surrebuttal testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2021-0240.

3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things that they purport to show.


Maurice Brubaker

Subscribed and sworn to before me this 5th day of November, 2021.




Notary Public

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Case No. ER-2021-0240

Surrebuttal Testimony of Maurice Brubaker

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Maurice Brubaker. My business address is 16690 Swingley Ridge Road, Suite 140,
3 Chesterfield, MO 63017.

4 **Q ARE YOU THE SAME MAURICE BRUBAKER WHO HAS PREVIOUSLY FILED
5 TESTIMONY IN THIS PROCEEDING?**

6 A Yes. I have previously filed both direct and rebuttal testimony on class cost of service,
7 revenue allocation and rate design issues presented in this proceeding.

8 **Q ARE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE OUTLINED IN
9 YOUR PRIOR TESTIMONY?**

10 A Yes. This information is included in Appendix A to my direct testimony filed on
11 September 17, 2021.

12 **Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

13 A This testimony is presented on behalf of the Missouri Industrial Energy Consumers
14 (“MIEC”), a non-profit corporation that represents the interests of large consumers in
15 Missouri rate matters.

**Maurice Brubaker
Page 1**

1 **Introduction and Summary**

2 **Q PLEASE STATE THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY AND**
3 **PROVIDE A BRIEF SUMMARY.**

4 A My surrebuttal testimony briefly responds to some of the points raised in the rebuttal
5 testimony of Staff witness Sarah Lange and Ameren Missouri witness Thomas
6 Hickman.

7 Staff witness Sarah Lange builds a lot of her rebuttal testimony around
8 statements contained in the so-called "RAP Manual." I point out that this manual is
9 nothing more than the opinion of the authors, and that it does not have the status or
10 command the respect of cost of service experts, like the NARUC cost allocation manual
11 does. The positions and theories expressed in the manual are not generally accepted
12 in the industry, and the Commission should not be influenced by them or base any
13 decisions on them.

14 In response to Staff's criticism of Ameren Missouri's allocation of distribution
15 system costs, I point out that the Large Primary Service ("LPS") class is less sensitive
16 to the determination and allocation of distribution system cost than other classes
17 because the LPS class takes all of its service at primary or higher voltages, in contrast
18 to the residential and many other classes that take service exclusively at the secondary
19 distribution voltage level. Accordingly, Staff's arguments about the distribution system
20 allocations, even if accepted, would have much less impact on the LPS class than on
21 any other class.

22 In response to the testimony of Ameren Missouri witness Thomas Hickman, I
23 point out that even under Ameren Missouri's class cost of service study the residential
24 class should be increased substantially more than any other class.

1 **Response to Staff's Rebuttal Testimony**

2 **Q HAVE YOU REVIEWED THE REBUTTAL TESTIMONY OF COMMISSION STAFF**
3 **WITNESS SARAH LANGE?**

4 **A** Yes.

5 **Q HOW DOES STAFF WITNESS SARAH LANGE FRAME HER CRITICISMS OF THE**
6 **COST ALLOCATION PRINCIPLES WHICH YOU (MECG AND AMEREN MISSOURI)**
7 **HAVE FOLLOWED IN PRESENTING YOUR TESTIMONY AND**
8 **RECOMMENDATIONS?**

9 **A** On page 4 of her rebuttal testimony, Staff witness Sarah Lange basically recites several
10 pages of excerpts from the so-called "RAP Manual," apparently preferring to adopt the
11 recommendations in that publication over those in the NARUC Cost Allocation Manual
12 as adopted and applied by Ameren Missouri, by me and also by MEGC witness Steve
13 Chriss.

14 **Q DO YOU CONSIDER THE RAP MANUAL TO BE AN AUTHORITATIVE SOURCE IN**
15 **THE SAME SENSE THAT THE NARUC COST ALLOCATION MANUAL IS**
16 **REGARDED AS AN AUTHORITATIVE SOURCE ON CLASS COST OF SERVICE**
17 **ISSUES?**

18 **A** No. The RAP Manual basically is a summary of how the authors would like to see cost
19 allocations performed.

20 The NARUC Cost Allocation Manual was developed over a period of years with
21 significant consideration by the commission staffs and commissions in various states.
22 It has withstood the test of time and is widely acknowledged as an authoritative source
23 on class cost allocation. In fact, the authoritative nature of the NARUC Manual has

1 also been recognized by the Missouri General Assembly when it enacted Section
2 393.1620. In contrast, the RAP Manual is authored by three individuals who have a
3 particular partisan point of view; which has developed as a result of their advocacy on
4 behalf of relatively low load factor customers, and heavily influenced by consideration
5 of greenhouse gas reduction mandates. Their goal of minimizing the importance of
6 customer demands and elevating the importance of energy consumption for purposes
7 of framing their cost allocation proposals is best understood in this context.

8 **Q HAVE YOU PREVIOUSLY PROVIDED COMMENTARY ON THIS MANUAL?**

9 A Yes. I discussed this manual at pages 11 and 12 of my rebuttal testimony and included
10 a report that was prepared by members of my firm on this report as Schedule
11 MEB-COS-R-3.

12 **Q AT PAGE 12 OF REBUTTAL TESTIMONY, STAFF WITNESS SARAH LANGE**
13 **REFERS TO COMMISSION DOCUMENTS IN CASE NOS. EA-2018-0202 AND**
14 **EA-2019-0181 CONCERNING AMEREN MISSOURI'S RECENT ADDITION OF**
15 **WIND PROJECTS AND SEEMS TO CONCLUDE THAT BECAUSE THESE**
16 **FACILITIES CREATE RENEWABLE ENERGY CERTIFICATES ("REC") THAT**
17 **THESE FACILITIES DO NOT HAVE CAPACITY VALUE, AND INSTEAD SHOULD**
18 **BE TREATED AS ENERGY-RELATED. DO YOU AGREE?**

19 A No. Consider first Case No. EA-2018-0202 where Staff witness Sarah Lange recites
20 from the Commission Order that this project (High Prairie) "...is intended to comply with
21 the renewable energy mandates of the law." While that in itself is an accurate
22 statement, it is misleading in context because that is not the only reason for the

1 Application, nor is it the only benefit produced by the facility. It also adds diversity to
2 the resource portfolio and provides capacity to the system.

3 The statement referencing the stipulation in Case No. EA-2019-0181 also is
4 misleading. An Agreement that the costs of the project are Renewable Energy
5 Standard (“RES”) compliance costs is unremarkable because the facility in question
6 (Atchison) also creates portfolio resource diversity and provides capacity value.¹

7 **Q IN YOUR EXPERIENCE, ARE UTILITIES CONSTRUCTING WIND AND SOLAR**
8 **PROJECTS EVEN IN STATES THAT DO NOT HAVE A MANDATORY RENEWABLE**
9 **RESOURCE PORTFOLIO REQUIREMENT?**

10 A Yes. A great example is our adjacent state of Iowa. Iowa does not have a renewable
11 portfolio resource standard. Yet, MidAmerican Energy has constructed significant
12 amounts of wind resources (satisfying over 50% of its energy requirements) that the
13 Iowa Utilities Board (similar to the Missouri Public Service Commission in function) has
14 found to be economic.

15 Focusing on a single feature of a resource (in this case, the ability to comply
16 with RES requirements) certainly is myopic and inconsistent with generally accepted
17 planning principles.

¹Borrowing from Staff witness Sarah Lange’s rebuttal testimony at pages 1 and 2, some of these statements could be described as “...blatantly misleading characterizations...”

1 Q MANY OF THE CRITICISMS THAT STAFF WITNESS SARAH LANGE DIRECTS
2 TOWARD AMEREN MISSOURI'S CLASS COST OF SERVICE STUDY CONCERNS
3 DETERMINATION AND ALLOCATION OF CUSTOMER COSTS AND
4 DISTRIBUTION SYSTEM DEMAND COSTS. TO WHAT EXTENT WOULD THESE
5 ISSUES IMPACT THE DETERMINATION OF THE COST TO SERVE THE LARGE
6 PRIMARY SERVICE CLASS (LPS)?

7 A The impact on the LPS class would be proportionately much less than for other classes
8 of customers where customer and distribution costs are a much larger percentage of
9 total cost of service than is the case for LPS. As shown in Table 5 on page 21 of my
10 direct testimony, 100% of the power delivered to the LPS class is at primary voltages
11 or higher, with no part of the service being delivered at the secondary level. In contrast,
12 100% of the service to the residential class, the small GS class, and the lighting class
13 is delivered at the secondary voltage level. Changes in the allocation of
14 distribution-related costs would therefore be much less impactful to the LPS class than
15 to others. Furthermore, the workpapers of the Ameren Missouri witness Thomas
16 Hickman² shows that the total of customer costs and distribution demand costs is only
17 about 11% of the allocated cost of service for the LPS class, whereas it is 35% of the
18 costs of the residential class, and 29% overall.

19 This analysis shows that disagreements about secondary distribution level
20 costs have no impact whatsoever on cost of service for the LPS class, and that the LPS
21 class is much less sensitive to changes in distribution system cost determination and
22 allocation than are other classes.

²Workpapers of Thomas Hickman, Cost of Service Workpapers, "Unbundled Cost of Service"
Section, columns AS-AZ, lines 76-81.

1 **Response to Ameren Missouri Witness Thomas Hickman**

2 **Q DID AMEREN MISSOURI WITNESS HICKMAN RESPOND TO THE ADJUSTMENTS**
3 **YOU MADE TO THE COST OF SERVICE STUDY THAT HE SPONSORS?**

4 A Yes. He has a brief response at pages 23 and 24 of his rebuttal testimony addressing
5 my recommendations for a different classification of certain production function
6 expenses. Specifically, I proposed modifications to Ameren Missouri's study to correct
7 its allocation for income taxes as well as the non-labor component of production
8 non-fuel operation and maintenance ("O&M") expenses.

9 **Q WHAT IS YOUR RESPONSE TO MR. HICKMAN?**

10 A I generally described the basis for my classification of some of these production
11 function expenses in my direct testimony. Nothing in Mr. Hickman's rebuttal testimony
12 changes that testimony.

13 **Q YOU HAVE RECOMMENDED A MOVEMENT TOWARD COST OF SERVICE EQUAL**
14 **TO 50% OF WHAT WOULD BE REQUIRED TO MOVE TO COST OF SERVICE AT**
15 **PRESENT RATES, FOLLOWED BY AN EQUAL PERCENTAGE INCREASE BASED**
16 **ON WHATEVER LEVEL OF REVENUE INCREASE THE COMMISSION FINDS**
17 **APPROPRIATE FOR AMEREN MISSOURI. HAVE YOU CALCULATED WHAT THE**
18 **CLASS REVENUE CHANGES AT PRESENT RATES WOULD BE UNDER THAT**
19 **RECOMMENDATION IF YOU WERE TO USE AMEREN MISSOURI'S CLASS COST**
20 **OF SERVICE STUDY AS FILED, RATHER THAN YOUR ADJUSTED CLASS COST**
21 **OF SERVICE STUDY?**

22 A Yes. Schedules MEB-COS-SUR-1 and MEB-COS-SUR-2 show those results.
23 Schedule MEB-COS-SUR-1 shows the adjustments needed to move to cost at present

1 rates. The changes in revenues by class to move 50% of the way toward cost of service
2 are shown on MEB-COS-SUR-2 and are very consistent with those shown on Schedule
3 MEB-COS-6, which is based on my adjusted class cost of service study. For example,
4 both analyses show about a 4% increase for the Residential class, and about a 5%
5 decrease for Large Primary.

6 **Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

7 **A** Yes.

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AMEREN MISSOURI
Case No. ER-2021-0240

**Class Cost of Service Study Results
and Revenue Adjustments to Move Each Class to Cost of Service
Using AMO's ECOS at Present Rates**

(Dollars in Thousands)

<u>Line</u>	<u>Rate Class</u>	<u>Base Revenues (1)</u>	<u>Current Rate Base (2)</u>	<u>Adjusted Operating Income (3)</u>	<u>Earned ROR (4)</u>	<u>Indexed ROR (5)</u>	<u>Income @ Equal ROR (6)</u>	<u>Difference in Income (7)</u>	<u>Revenue Change (8)</u>	<u>Percent Change (9)</u>
1	Residential	\$ 1,273,043	\$ 5,601,036	\$ 173,659	3.100%	65	\$ 266,861	\$ 93,202	\$ 105,256	8.3%
2	Small GS	274,322	1,108,885	57,091	5.148%	108	52,833	(4,258)	(4,809)	-1.8%
3	Large GS/Primary	727,565	2,571,567	189,023	7.351%	154	122,522	(66,501)	(75,101)	-10.3%
4	Large Primary	188,576	609,212	46,881	7.695%	162	29,026	(17,855)	(20,164)	-10.7%
5	Company Owned Lighting	35,640	145,390	13,110	9.017%	189	6,927	(6,183)	(6,982)	-19.6%
6	Customer Owned Lighting	<u>2,849</u>	<u>17,085</u>	<u>(780)</u>	-4.566%	-96	<u>814</u>	<u>1,594</u>	<u>1,800</u>	63.2%
7	Total	\$ 2,501,995	\$ 10,053,175	\$ 478,984	4.765%	100	\$ 478,984	\$ -	\$ -	0.0%

AMEREN MISSOURI
Case No. ER-2021-0240

**Cost of Service Adjustments for
50% Movement Toward Cost of Service
Using AMO's ECOS at Present Rates
(\$ in Millions)**

<u>Line</u>	<u>Rate Class</u>	<u>Current Revenues (1)</u>	<u>Move 50% Toward Cost Of Service⁽¹⁾ (2)</u>	<u>Adjusted Current Revenue (3)</u>	<u>Revenue-neutral Percent Change in Current Revenue (4)</u>
1	Residential	\$ 1,273.0	\$ 52.6	\$ 1,325.7	4.1 %
2	Small GS	274.3	(2.4)	271.9	(0.9)%
3	Large GS/Primary	727.6	(37.6)	690.0	(5.2)%
4	Large Primary	188.6	(10.1)	178.5	(5.3)%
5	Company Owned Lighting	35.6	(3.5)	32.1	(9.8)%
6	Customer Owned Lighting	<u>2.8</u>	<u>0.9</u>	<u>3.7</u>	31.6 %
7	Total	\$ 2,502.0	\$ -	\$ 2,502.0	0.0 %

(1) Increase to equal cost of service from column 8 of Schedule MEB-COS-SUR-1, times 50%.