

*Exhibit No.:*  
*Issue(s):* *Voltage Adjustment  
Factors Jurisdictional  
Allocations*  
*Witness:* *Alan J. Bax*  
*Sponsoring Party:* *MoPSC Staff*  
*Type of Exhibit:* *Surrebuttal Testimony*  
*Case Nos.:* *ER-2022-0129 and  
ER-2022-0130*  
*Date Testimony Prepared:* *August 16, 2022*

**MISSOURI PUBLIC SERVICE COMMISSION**

**INDUSTRY ANALYSIS DIVISION**

**ENGINEERING ANALYSIS DEPARTMENT**

**SURREBUTTAL TESTIMONY**

**OF**

**ALAN J. BAX**

**Evergy Metro, Inc. d/b/a Evergy Missouri Metro  
Case No. ER-2022-0129**

**Evergy Missouri West, Inc. d/b/a Evergy Missouri West  
Case No. ER-2022-0130**

*Jefferson City, Missouri  
August 2022*

1 **SURREBUTTAL TESTIMONY**

2 **OF**

3 **ALAN J. BAX**

4 **Evergy Metro, Inc. d/b/a Evergy Missouri Metro**  
5 **Case No. ER-2022-0129**

6 **Evergy Missouri West, Inc. d/b/a Evergy Missouri West**  
7 **Case No. ER-2022-0130**

8 Q. Please state your name and business address?

9 A. Alan J. Bax, P.O. Box 360, Jefferson City, Missouri, 65102.

10 Q. By whom are you employed and in what capacity?

11 A. I am employed by the Missouri Public Service Commission (Commission) as  
12 an Associate Engineer in the Energy Analysis Department of the Industry Analysis Division.

13 Q. Are you same Alan J. Bax that previously filed direct and rebuttal testimonies  
14 in these cases?

15 A. Yes.

16 Q. Will your surrebuttal testimony be applicable to both the general rate case filed  
17 by Evergy Missouri Metro (“Evergy Metro”), ER-2022-0129, and the general rate case filed  
18 by Evergy Missouri West (“Evergy West”) in ER-2022-0130?

19 A. Yes, this surrebuttal testimony will be filed in both general rate cases.

20 Q. What is the purpose of your surrebuttal testimony?

21 A. In my surrebuttal testimony, I will discuss the rebuttal testimony of Evergy  
22 witness Linda J. Nunn regarding her discussion of voltage adjustment factors (“VAFs”) she  
23 recommends be utilized in the respective Fuel Adjustment Clauses (“FACs”) of Evergy Metro

1 and Evergy West. I will also address the rebuttal testimonies filed by Evergy witnesses  
2 Ronald Klote and John Wolfram regarding jurisdictional allocations.

3 **REBUTTAL TESTIMONY OF EVERGY WITNESS LINDA J. NUNN**

4 Q. What did Evergy witness Linda J. Nunn identify as a discrepancy in her  
5 rebuttal testimony regarding Staff's proposed Voltage Adjustment Factors (VAFs)  
6 recommended in its Direct Testimony?

7 A. Beginning on page 17, line 17 continuing through page 18, line 15, Ms. Nunn  
8 indicates that Staff incorrectly proposed only three VAFs (transmission, primary and  
9 secondary) in its direct testimony and that there should be a fourth VAF calculated at the  
10 substation level. In addition, Ms. Nunn asserts that, based on information provided in the  
11 latest loss study, the VAFs that Staff calculated for Evergy Metro were inaccurate.

12 Q. Do you agree with the premise that four VAFs should be reflected in the  
13 respective FACs of Evergy Metro and Evergy West?

14 A. Yes, I believe it is appropriate to include four VAFs in the respective FACs  
15 of both Evergy Metro and Evergy West. However, in the most recent rate cases involving  
16 the predecessors of Evergy Metro and Evergy West, both in 2016 (ER-2016-0156 and  
17 ER-2016-0285) and in 2018 (ER-2018-0145 and ER-2018-0146), the witness for Kansas City  
18 Power & Light ("KCPL") and KCPL – Greater Missouri Operations ("KCPL-GMO") testified  
19 that there was insufficient metering to measure voltage at the substation level. Consequently,  
20 this witness only recommended three VAFs in his proposed FAC tariff revisions. In the  
21 current cases, Ms. Nunn has indicated that four VAFs be reflected in the respective FACs for  
22 both Evergy Metro and Evergy West. Staff concurs with this recommendation. In reviewing  
23 the data provided in the loss study referenced by Ms. Nunn, I have calculated the

Surrebuttal Testimony of  
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1 following four VAFs to be included in the respective FACs for Evergy Metro and  
2 Evergy West. I have reflected these calculated VAFs in Schedule AJB-s1 attached to this  
3 surrebuttal testimony and also below:

4 EVERGY METRO:

5	Transmission:	1.0300
6	Substation:	1.0378
7	Primary:	1.0496
8	Secondary:	1.0690

9 EVERGY WEST:

10	Transmission:	1.0300
11	Substation:	1.0388
12	Primary:	1.0503
13	Secondary:	1.0766

14 Q. Did you provide these calculated VAFs to any other Staff member?

15 A. Yes. These VAFs were provided to Staff witness Amanda Conner to use in  
16 determining the Fuel Adjustment Rates (FARs) reflected in the proposed FACs for both  
17 Evergy Metro and Evergy West.

18 **REBUTTAL TESTIMONY OF EVERGY WITNESS JOHN WOLFRAM**

19 Q. In his Rebuttal Testimony, Mr. Wolfram cited the Direct Testimony of  
20 Greg Meyer, taking issue with Mr. Meyer's assertion regarding Mr. Wolfram's  
21 recommendation to average the allocation methodology differences between the states of  
22 Missouri and Kansas as "not being just and reasonable." Do you agree with Mr. Wolfram?

23 A. No, as I said previously in my rebuttal testimony, I do not agree with  
24 Mr. Wolfram's recommendation to average the differences between the allocation  
25 methodologies that exist in each of the respective states of Missouri and Kansas.

1 Q. On page 7 of his rebuttal testimony, Mr. Wolfram notes the disparities between  
2 the allocation methodologies utilized in the respective states needs to be addressed as  
3 indicated/illustrated most recently considering the effects experienced as a result of  
4 Winter Storm Uri in February 2021. What is your response to this assertion?

5 A. The differing allocation methodologies referenced by Mr. Wolfram that are  
6 used in each state have either been ordered by the respective state Commissions, or  
7 consistently agreed to by Evergy and/or its predecessors within the context of Stipulations and  
8 Agreements filed in corresponding rate cases dating back to at least 2006. Most recently, the  
9 allocation methodologies currently in use in each respective state were as a result of the rate  
10 cases in 2018. It is inappropriate to challenge one aspect of the numerous items included  
11 within an approved Stipulation and Agreement, one in which Evergy's predecessors were a  
12 signatory, over two years following its initiation. A complete analysis of all aspects of the  
13 aforementioned Stipulation and Agreement would need to be undertaken, not just the aspect  
14 involving jurisdictional allocations. For more on this topic, see the Surrebuttal Testimony of  
15 Staff witness Keith Majors.

16 **REBUTTAL TESTIMONY OF EVERGY WITNESS RONALD A. KLOTE**

17 Q. Beginning on page 15, line 11 and continuing to page 24, line 6, Mr. Klotz also  
18 comments on the historical and on-going differences in the allocation methodologies adopted  
19 in each respective state and how Winter Storm Uri highlighted these differences. Most  
20 notably is the differing methods employed by Missouri and Kansas to allocate off-system  
21 sales margins. What is your response?

22 A. The Missouri Public Service Commission has consistently ordered the same  
23 methodology since the "Wolf Creek case" in the mid-1980s. As I related in my direct

Surrebuttal Testimony of  
Alan J. Bax

1 testimony, in the “Wolf Creek case”, the Missouri Commission ordered the use of a 4 CP in  
2 regard to calculating demand allocation factors for the respective jurisdictions, citing the  
3 results of associated FERC tests, which were previously described in my direct testimony, and  
4 the use of the energy allocation factor in allocating revenues realized with off-system  
5 sales margins. The Missouri Commission has consistently ordered these allocation  
6 methodologies in every rate case since (2006, 2007, 2009, 2012, 2014, 2016, and 2018). In  
7 contrast, the Kansas Commission has changed its approved allocation methodologies from  
8 this “mutually accepted position” that was recommended and subsequently ordered in the  
9 Wolf Creek case. For example, the Kansas Commission currently has ordered utilizing what  
10 is termed the “unused energy allocator” in allocating off-system sales margins, as described in  
11 the Rebuttal Testimony of Mr. Klote. As previously stated above, any differences in  
12 allocation methodologies between the states has either been ordered by the respective state  
13 Commission and/or notably agreed to by Evergy and/or its predecessors as signatories to  
14 corresponding Stipulation and Agreements in every rate case dating back to the  
15 aforementioned “Wolf Creek case”. For further information regarding this aspect of applying  
16 differing allocation methodologies, please see the Rebuttal and Surrebuttal Testimonies of  
17 Staff witness Keith Majors.

18 Q. Does this conclude your Surrebuttal Testimony?

19 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Evergy Metro, Inc. d/b/a Evergy )  
Missouri Metro's Request for Authority to ) Case No. ER-2022-0129  
Implement a General Rate Increase for Electric )  
Service )

In the Matter of Evergy Missouri West, Inc. )  
d/b/a Evergy Missouri West's Request for ) Case No. ER-2022-0130  
Authority to Implement a General Rate )  
Increase for Electric Service )

**AFFIDAVIT OF ALAN J. BAX**

STATE OF MISSOURI )  
 ) ss.  
COUNTY OF COLE )

COMES NOW ALAN J. BAX and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Surrebuttal Testimony of Alan J. Bax*; and that the same is true and correct according to his best knowledge and belief.

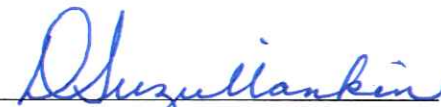
Further the Affiant sayeth not.

  
\_\_\_\_\_  
ALAN J. BAX

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 10<sup>th</sup> day of August 2022.

D. SUZIE MANKIN  
Notary Public - Notary Seal  
State of Missouri  
Commissioned for Cole County  
My Commission Expires: April 04, 2025  
Commission Number: 12412070

  
\_\_\_\_\_  
Notary Public

**EVERGY METRO - ER-2022-0129**

**Voltage Adjustment Factors**

Station	Station Input	Metered Sales	Losses Total System	Station Output	% Losses Total System
Generation				8,600,000	
Transmission	8,600,000	340,959	250,485	8,008,556	3.0000%
Substation	8,008,556	246,276	59,908	7,702,372	0.7537%
Primary	7,702,372	620,063	87,211	6,995,098	1.1452%
Secondary	6,995,098	6,868,556	126,542	0	1.8423%

Station	Metered Sales	Station to Station Losses			
		Trans Sales	Sub Sales	Pri Sales	Sec Sales
Generation					
Transmission	340,959	10,229	7,444	18,957	213,856
Substation	246,276		1,856	4,727	53,325
Primary	620,063			7,101	80,110
Secondary	6,868,556				126,542

Station	Cummalative Losses				FAC Expansion Factors
	Trans Sales	Sub Sales	Pri Sales	Sec Sales	
Generation					
Transmission	10,229	9,300	30,785	473,832	<b>1.0300</b>
Substation		1,856	11,828	259,977	<b>1.0378</b>
Primary			7,101	206,652	<b>1.0496</b>
Secondary				126,542	<b>1.0690</b>



**EVERGY WEST - ER-2022-0130**

**Voltage Adjustment Factors**

Station	Station Input	Metered Sales	Losses Total System	Station Output	% Losses Total System
Generation				8,583,034	
Transmission	8,583,034	241,668	249,991	8,091,375	3.0000%
Substation	8,091,375	311,633	68,559	7,711,183	0.8546%
Primary	7,711,183	612,042	84,124	7,015,017	1.1030%
Secondary	7,015,017	6,843,125	171,892	0	2.5119%

Station	Metered Sales	Station to Station Losses			
		Trans Sales	Sub Sales	Pri Sales	Sec Sales
Generation					
Transmission	241,668	7,250	9,429	18,722	214,590
Substation	311,633		2,663	5,288	60,608
Primary	612,042			6,751	77,373
Secondary	6,843,125				171,892

Station	Cummalative Losses				FAC Expansion Factors
	Trans Sales	Sub Sales	Pri Sales	Sec Sales	
Generation					
Transmission	7,250	12,092	30,761	524,463	<b>1.0300</b>
Substation		2,663	12,039	309,873	<b>1.0388</b>
Primary			6,751	249,265	<b>1.0503</b>
Secondary				171,892	<b>1.0766</b>