Exhibit No.: Sponsoring Party: MoPSC Staff

Issue(s): Depreciation Witness: Cedric E. Cunigan, PE *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

CEDRIC E. CUNIGAN, PE

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

** Denotes Confidential Information **

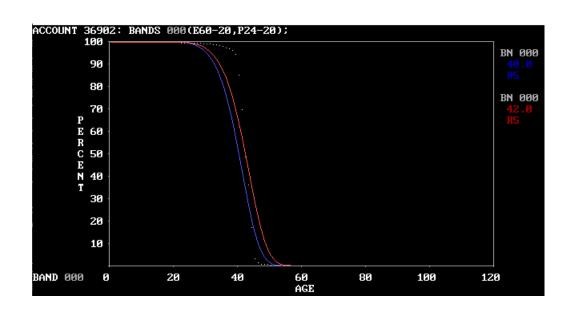
1	SURREBUTTAL TESTIMONY				
2	OF				
3	CEDRIC E. CUNIGAN, PE				
4 5	Evergy Metro, Inc., d/b/a Evergy Missouri Metro Case No. ER-2022-0129				
6 7	Evergy Missouri West, Inc., d/b/a Evergy Missouri West Case No. ER-2022-0130				
8	Q. Please state your name and business address.				
9	A. My name is Cedric E. Cunigan. My business address is 200 Madison Street,				
10	Jefferson City, Missouri 65101.				
11	Q. Are you the same Cedric E. Cunigan that previously provided direct testimony				
12	and rebuttal testimony in this case?				
13	A. Yes.				
14	EXECUTIVE SUMMARY				
15	Q. What is the purpose of your surrebuttal testimony?				
16	A. I will be responding to Evergy witness Mr. John S. Spanos regarding				
17	depreciation, to OPC witness John A. Robinett's suggestions regarding treatment of the				
18	Sibley plant, and to Renew Missouri's witness Philip Fracica regarding the Solar Subscription				
19	Pilot ("SSP") and the Residential Battery Energy Storage Pilot ("RBES").				
20	Q. Does any other Staff Witness respond to Mr. Spanos' rebuttal testimony?				
21	A. Yes. Staff Witness David Buttig responds to Mr. Spanos' rebuttal testimony				
22	concerning survival curves for certain accounts of Evergy Missouri Metro ("EMM").				
23	DEPRECIATION				
24	Q. What depreciation issues need to be addressed?				

A. For Evergy Missouri West ("EMW"), Mr. Spanos disputes the service life
 estimates of two accounts, 369.02 Services Underground and 370.02 Meters – AMI.
 Mr. Spanos also criticizes Staff's use of the whole life method for transmission, distribution,
 and general plant accounts. I will also address statements Mr. Spanos makes regarding terminal
 net salvage as it relates to EMM and EMW.

Q. What life estimate did Staff choose for account 369.02 Services Underground
and why did Staff choose it?

8 A. For account 369.02 Staff chose a 42-R5 curve while Mr. Spanos chose a 9 40-R5 curve. Iowa curves are fitted to the stub survival curve using both visual and 10 mathematical fitting methods. Staff used the dataset provided by the Company when selecting 11 its life curves but determined that the 42-R5 curve provided a better fit for the data. The graph 12 below shows the percent surviving for account 369.02 at each age. The white dots are the data 13 from Company records. Staff's chosen curve appears in red and Mr. Spanos's chosen curve 14 appears in blue. Staff's curve is a closer visual fit for the dataset.

15



16

1 2 Q. What life estimate did Staff choose for account 370.02 Meters – AMI and why did Staff choose it?

3 Staff's recommended service life estimate for account 370.02, Meters-AMI, is more 4 reasonable than Mr. Spanos' recommendation. Mr. Spanos "takes into consideration that the new meters have already been replaced prior to 15 years.¹" Staff questions the prudency of 5 6 some of the early retirements of meters that were not retired due to a failure of the meter and 7 has recommended a disallowance in this case. See Staff Witness Claire Eubanks' testimony in this case. The AMI meters were designed for 20+ years of life.² Further, there were not 8 9 enough retirements to form a significant stub curve³ to estimate the average life.⁴ With little 10 data to base this estimate on, Staff went with the proposed design life of the manufacturer. 11 Staff's recommended service life estimate is further supported by the response to Staff Data 12 Request MO PSC 0397 in Case No. ER-2022-0129, in which the Company notes that it is 13 expected for some AMI meters to last more than 20 years and that some have been replaced 14 prior to even 15 years. For these reasons Staff has chosen to stick with the 20 year life 15 recommended by the manufacturer for both Evergy Missouri Metro and Evergy Missouri West.

16

Q. What does Mr. Spanos state in his rebuttal testimony about Staff's use of the whole life method for transmission, distribution, and general plant accounts?

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A. Mr. Spanos states that it is not reasonable to utilize different methods of depreciation for specific accounts within the same depreciation study.⁵

¹ Response to Staff Data Request MO PSC 0397 in ER-2022-0129.

² Response Staff Data Request MO PSC 0298 in ER-2022-0130.

³ A stub curve is a partial survivor curve when there are still assets that have not been retired.

⁴ Two percent of the account was retired. Staff's software is not able to fit a curve accurately until at least fifteen percent has been retired.

⁵ Case No ER-2022-0130, Rebuttal Testimony of John Spanos page 18, lines 19-21.

1 2 Q. Does Staff agree that it is not reasonable to utilize different methods of depreciation for specific accounts within the same depreciation study?

3 A. No. It is reasonable to utilize different methods of depreciation for separate 4 accounts within the same study. General Plant accounts are frequently amortized and treated 5 differently than the other accounts. In fact, Mr. Spanos recommends separate treatment for 6 certain general plant accounts in his own study. The use of depreciation method should be 7 adjusted to what makes the most sense for the accounts being studied. The whole life method 8 uses the same estimation of service life and net salvage that Staff would have used for the 9 remaining life method. A major difference between the whole life method and remaining 10 life method is that the reserve balances, which Staff has seen fluctuate greatly between the last 11 rate case and this filing, are not used in calculating the depreciation rates when using the whole 12 life method.

Q. Mr. Spanos argues in his rebuttal testimony that the currently approved rates use
the remaining life method and that the whole life method does not ensure full recovery, does
Staff agree?

A. No. While the currently approved rates were calculated using the remaining life
method, this does not mean that all future rates have to be determined using the remaining life
method and that full recovery cannot be claimed through the whole life method. Full recovery
of plant is possible through the whole life method, though it may require manual adjustments.

Q. What does Mr. Spanos state regarding terminal net salvage in his rebuttal
testimony on page 8?

1	A. Mr. Spanos states the Commission has ruled net salvage should be					
2	included in depreciations and references the Third Report and Order from Case No.					
3	GR-99-315 which stated:					
4 5 6 7 8 9	The Commission finds that the fundamental goal of depreciation accounting is to allocate the full cost of an asset, including its net salvage cost, over its economic or service life so that utility customers will be charged for the cost of the asset in proportion to the benefit they receive from its consumption. The Commission further finds that the method utilized by Laclede is consistent with that fundamental goal. ⁶					
10	Q. Is this the most recent commission ruling regarding terminal net salvage?					
11	A. No. The most recent ruling for Evergy regarding terminal net salvage was in					
12	Case No. ER-2016-0285. Staff quoted this section in rebuttal testimony, but repeats it here for					
13	clarity. The Findings of Fact from that Report and Order stated in part:					
14	95. Terminal net salvage should not be included in depreciation rates because					
15	the actual cost KCPL will incur is unknown, cannot be measured, and is					
16	speculative.					
17	96. The Commission has previously excluded terminal net salvage from rates					
18	for exactly that reason.					
19	97. Nothing has changed in the interim and there is no good reason to admit					
20	costs for terminal net salvage to rates now.					
21	98. As with any speculative cost, if the amount accrued for retirement during the					
22	plant's operation in fact exceeds the actual cost of that retirement, there will be					
23	no feasible way to return that money to the ratepayers that paid too much. ⁷					

 ⁶ Case No. GR-99-315, Third Report and Order, Issued January 11, 2005, p. 9.
 ⁷ 1 Case No. ER-2016-0285 Report and Order issued May 3, 2017, page 37.

1	Q. What does Mr. Spanos state on page 17 of his direct testimony regarding				
2	generational inequity?				
3	А.	A. Mr. Spanos states:			
4 5 6 7 8		The exclusion of net salvage costs results in intergenerational inequity because future customers will be required to pay for the costs of retired assets that are no longer providing service. Despite the fact that Staff has recognized that terminal net salvage costs will occur in the future, Staff continues to propose to exclude these costs from depreciation. ⁸			
9	Q.	Q. Does Staff agree that not including terminal net salvage costs can result in			
10	intergeneration inequity?				
11	А.	Yes. However, using speculative cost estimates for terminal salvage can also			
12	result in intergenerational inequity. For example, if a terminal net salvage estimate is used to				
13	set rates for a plant in the present, depreciation rates and expense would increase. If it was				
14	found out years later that the estimate to retire that plant is higher than what is actually required				
15	to close the plant there is no way to return the over collected amount to rate payers who paid in				
16	earlier but are no longer customers. The utility would have received those funds well in				
17	advance of the retirement and been able to earn a return on them over the life of the asset.				
18	If the estimate is lower than needed, the utility would still need to collect additional revenue				
19	from future customers that did not receive benefits of the generation. As I stated in rebuttal, it				
20	is near impossible to eliminate generational inequity without foreknowledge of the final				
21	termination costs.				
22	Q.	What does Staff recommend?			
23	А.	Staff recommends, consistent with the most recent Commission Orders on this			
24	issue, that terminal net salvage not be included in depreciation expense at this time.				

⁸ Rebuttal Testimony of John Spanos page 17, lines 15 -19.

1

SIBLEY NET BOOK VALUE

2 Q. What options does Mr. Robinett present to calculate the Sibley net book value
3 (NBV) on pages 14-17 of his rebuttal testimony?

Mr. Robinett presents three starting point options for the net book value at 2018. 4 A. 5 The first is the \$299,947,216 previously presented by Greg Meyer representing Missouri 6 Energy Consumers Group in direct testimony. Mr. Meyer used Staff's true up accounting 7 schedules from Case No. ER-2018-0146 as the starting point. The second option Mr. Robinett 8 states is the \$145,161,990 used by the Company and Staff. The third option he presents is 9 \$190,833,490. This is an option Mr. Robinett calculated by moving balances forward from the 10 2014 depreciation theoretical reserve values. Mr. Robinett admits that some values are 11 estimated in this third option. It is Staff's understanding that Mr. Robinett is recommending 12 the third option.

Q. Given this is Staff's first opportunity to respond to Mr. Robinett's third option,
do you think it is a viable option?

A. The method appears reasonable, but would require more in depth calculations to
accurately capture the value. Also, this method of moving the balances forward from 2014
would need to be done for all steam production accounts⁹ and not just Sibley.

18

Q.

Why is there so much variation between these net book value options?

A. The main reason for the differences between these amounts is largely due to the
differences in depreciation reserve balances used for each estimate. In the 2018 rate case,
Staff's position differed from the Company's in two areas. In plant-in-service for Sibley, the
difference is approximately \$4.8 million. In the reserve balances for Sibley, the difference is

⁹ Steam production accounts refers to accounts 310 to 316 in the depreciation study.

approximately \$150 million. These differences combined account for the roughly \$154 million
 differences between the Company's and Mr. Meyer's current net book values. Staff is not sure
 how these differences would correlate to Mr. Robinett's third option.

4

Q. Why do the depreciation reserve balances differ between the parties?

A. The book reserves are not tied to an account that is specific for each location or unit, meaning you can't just check the Company's records to find the amount. It has to be tracked separately. Mr. Spanos states in his rebuttal testimony, the Companies' fixed asset system that presents the book reserve at the location level has not been developed and maintained to each location/unit.¹⁰ Each party calculated an amount in a slightly different manner. As stated above, Mr. Meyer used Staff's 2018 true up accounting schedules. Mr. Spanos allocated reserve balances as a part of his depreciation study.

12

Q. Is reallocating reserve balances a normal part of depreciation studies?

A. Yes. Reserve balances can be reallocated when there is significant over or under
accrual from the expected amount given the current age and expected life of an asset. However,
the controversy with this rebalancing is due to the timing of the rebalancing and the recent
retirement of Sibley.

17

Q. Why does the timing matter?

A. The parties disagree on whether or not there should be a return on and of the
unrecovered Sibley investment. By shifting the Sibley reserve balances higher, the Company
in effect ensures immediate recovery on the portion of investment that is shifted to Sibley
reserve balances and a chance to earn a return on other steam production plant accounts that
had their reserves lessened. If Sibley were to continue operating, there would be no dispute on

¹⁰ Case No. ER-2022-0130 Rebuttal Testimony of John S Spanos page 24 lines 16-18.

whether the plant should earn a return. The rebalancing could be questioned, but it would not
 have as significant of an effect on rates.

3 Q. What is the effect on rates should the Commission choose a different net
4 book value?

5 A. If the net book value of Sibley is calculated using the methods proposed by Mr. Greg Meyer or Mr. John Robinett, then the remaining steam production plant accounts 6 7 would need to be rebalanced using the same method. The calculation of depreciation rates 8 using the remaining life method requires reserve balances as one of the inputs. Also, the reserve 9 balances for all steam plants are held in the same account since the Company does not maintain accounts at the location level. It would not be reasonable to use one method to determine the 10 11 reserve amounts for the Sibley plant and not use the same method for the other steam production 12 plants. Staff estimated the effect on reserve balances should they be carried forward from the 13 2018 true up values. This resulted in a roughly \$173 million increase of the steam production 14 plant reserve balances from Staff's current EMS run, with Sibley plant removed. This amount 15 is roughly the same as the increase of Sibley plant to be amortized if you adjust the \$154 million 16 NBV estimate from 2018 for inflation over the last few years.¹¹

17

Q. What is Staff's recommendation?

A. Staff recommends that the Commission use Staff's position presented in
Staff's Accounting Schedules in this case. These use a \$145.6 NBV for Sibley and are
discussed in further in the Surrebuttal Testimony of Staff witness Keith Majors. Staff also
recommends the Commission order the depreciation rates submitted in the direct testimony of
Cedric E Cunigan as schedule CEC-d1.

¹¹ Staff used an average inflation of 3.5% over 3 years.

1	If the Commission determines that the rebalancing is not reasonable, then the			
2	depreciation rates for all steam production accounts should be recalculated using the starting			
3	point and method chosen to rebalance Sibley.			
4	Q. Please restate the Commissions options for determining the NBV of Sibley.			
5	A. The Commission has the following options:			
6	• \$145.6 Million – Evergy and Staff position using most recent depreciation study;			
7	• \$254 Million – MECG position using 2018 accounting schedules and updating			
8	to present; and			
9	• \$190.8 Million – OPC position using 2014 depreciation and updating to present.			
10	RESIDENTIAL BATTERY ENERGY STORAGE PROGRAM			
11	Q. What does Mr. Fracica recommend regarding Evergy's RBES pilot?			
12	A. Mr. Fracica recommends "the Commission approve Evergy's proposed RBES			
13	pilot program, and to even include additional terms similar to those of Liberty New			
14	Hampshire's residential battery storage program. ¹² "			
15	Q. Does Staff agree with Mr. Fracica's recommendation to include additional terms			
16	similar to those of Liberty New Hampshire's residential battery storage program?			
17	A. Staff is not sure of all of the changes Mr. Fracica is proposing to make since			
18	specific items or tariff language was not provided. As it stands, the only definite change Staff			
19	could determine was offering compensation for energy discharged onto the grid by customer			
20	batteries at the same rate offered to net metered customers for excess generation. Staff is not			
21	opposed to the concept of offering compensation for energy discharged to the grid in general;			

¹² Case No. ER-2022-0130, Rebuttal Testimony of Philip Fracica page 22, lines 15-17.

1	however, this pilot already is subsidizing the batteries for the customers in the pilot. Staff is			
2	opposed to the large cost of the program with benefits only flowing to a small amount of			
3	customers. Adding compensation on top of subsidizing the battery system for the participants			
4	is a step in the wrong direction.			
5	Q. What is Staff's recommendation?			
6	A. Staff is opposed to the program and recommends the Commission reject			
7	the proposal.			
8	SOLAR SUBSCRIPTION PILOT			
9	Q. What does Mr. Fracica recommend regarding Evergy's proposed changes to the			
10	SSP tariff?			
11	A. Mr. Fracica recommends approval of the changes citing that the modifications			
12	will "reduce waiting times and accommodate customers that may currently be excluded or stuck			
13	on a waitlist ¹³ ." He also cites Ameren Missouri's recent expansion of a similar program.			
14	Q. Does Staff agree with the reduction in wait time being a valid reason to support			
15	Evergy's proposed changes?			
16	A. No. Evergy has not shown successful operation of the pilot or a need for			
17	expansion at this point. In response to Staff Data Request 0302 in this case, Evergy states that			
18	there were customers on a waitlist, but that only amounted to ** EXECUTE ** for EMW. The			
19	Stipulation and Agreement approved by the Commission in Case No. EA-2022-0043 allows			
20	for the use of 8,000 to 10,000 additional shares of the Hawthorn site to be used for the SSP			
21	as customer demand grows. Evergy would need to fill these shares prior to expanding to a			

¹³ Case No. ER-2022-0130, Rebuttal Testimony of Philip Fracica page 13, lines 4-6.

second facility. This is at least 3 times the capacity currently allotted to the SSP for Evergy
 Missouri Metro and EMW.

3

Q. Is Ameren's subscription program similar to Evergy's?

A. The programs are similar; however, Ameren successfully completed its first
facility and ran the program for some time prior to major changes to its program._Additionally,
Ameren filled its waitlist much quicker and did not have excess capacity that was available to
be used in its program prior to the programs expansion. Evergy has not completed construction
of its first facility yet, nor run the program. Also, Evergy's Hawthorn solar facility will have
substantial amounts of capacity available to expand the program.

10

Q. Is Staff opposed to future expansion of the SSP?

Does this conclude your testimony?

A. No. Staff is not opposed to expansion of the program sometime in the future,
but at present, it is premature to expand the program. Evergy still needs to complete its first
facility, run the pilot as designed, and provide evaluations as agreed to in the Stipulation and
Agreement in Case No. EA-2022-0043.

15

16

A. Yes.

Q.

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 Implement a General Rate Increase for Electric Service	')))	Case No. ER-2022-0129
In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Request for Authority to Implement a General Rate Increase for Electric Service)))	Case No. ER-2022-0130

SS.

AFFIDAVIT OF CEDRIC E. CUNIGAN, PE

STATE OF MISSOURI)) COUNTY OF COLE)

COMES NOW CEDRIC E. CUNIGAN, PE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Surrebuttal Testimony of Cedric E. Cunigan, PE; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

CEDRIC E CUNIGAN, PE

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 _____/O day of August 2022.

Munellankin Notary Public