Exhibit No.: Issue(s): Market Based Demand Response Program/ Residential Battery Energy Storage Pilot/ Low-Income Solar Subscription Pilot Witness/Type of Exhibit: Seaver/Surrebuttal Sponsoring Party: Public Counsel Case No.: ER-2022-0129 and ER-2022-0130

SURREBUTTAL TESTIMONY

OF

JORDAN SEAVER

Submitted on Behalf of the Office of the Public Counsel

EVERGY METRO, INC. D/B/A EVERGY MISSOURI METRO AND EVERGY MISSOURI WEST, INC. D/B/A EVERGY MISSOURI WEST

CASE NOS. ER-2022-0129 AND ER-2022-0130

August 16, 2022

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EVERGY MISSOURI METRO d/b/a EVERGY MISSOURI METRO & EVERGY MISSOURI WEST d/b/a EVERGY MISSOURI WEST

CASE Nos. ER-2022-0129 & ER-2022-0130

1	I. INTRODUCTION					
2	Q.	What is your name and what is your business address?				
3	A.	My name is Jordan Seaver, and my business address is 200 Madison Street, Governor Office				
4		Building, Suite 650, Jefferson City, MO 65102.				
5	Q.	By whom are you employed and in what capacity?				
6	А.	I am employed by the Office of Public Counsel ("OPC") as a Policy Analyst.				
7	Q.	Are you the same Jordan Seaver who filed direct and rebuttal testimony in Case Nos.				
8		ER-2022-0129 and ER-2022-0130?				
9	А.	I am.				
10	Q.	What is the purpose of your surrebuttal testimony?				
11	A.	In this testimony I address arguments made by witnesses Kimberly Winslow and Philip				
12		Fracica. The arguments from the testimony of Kimberly Winslow cover the Market Based				
13		Demand Response Program ("MBDR"), the Residential Battery Energy Storage Pilot				
14		("RBES"), and the Low-Income Solar Subscription Pilot ("LI SSP"). The arguments from				
15		Philip Fracica are about the LI SSP.				
16	II. MBDR AND DEMAND RESPONSE PROGRAM CHANGES					
17	Q.	What are Ms. Winslow's arguments against your recommendations for the MBDR and				
18		related demand response tariffs?				
19	A.	Ms. Winslow's arguments can be classified in two different groups: (i) arguments against the				
20		proposal that the MBDR program be discontinued, and (ii) arguments against the				
21		recommendations relating to the proposal that the MBDR program be discontinued.				
22	Q.	What is Ms. Winslow's argument for (i)?				
23	А.	The argument Ms. Winslow provides for (i) can be stated as follows:				

1		(1) Low energy prices in the market (i.e., SPP) do not entice participation in demand
2		response programs
3		(2) When the MBDR program was created, energy prices in the market were low
4		(3) Thus, from (1) and (2), there was no participation because customers were not
5		enticed to participate due to low energy prices in the market
6		(4) Energy prices in the market have increased in the last 1 to 2 years
7		(5) Therefore, customers are now enticed to participate in the MBDR program
8	Q.	What is the problem, or problems, with this argument?
9	A.	The main problem with this argument are the empirical claims made in premise (1) and in the
10		conclusion (i.e., (5)). The claim made in (1) is intuitively plausible, but no support has been
11		provided to show that this is true. The conclusion, (5), is assumed to follow because it is a
12		negation of (1) , itself presumed to be true. But, taking (1) and (4) together with responses to
13		DRs, ¹ we can see that (1) is in fact not true, or at least not true of all commercial and industrial
14		customers. There has been no participation in the MBDR program since its inception,
15		including up to August 10, 2022. Assuming that (4) is true—and I see no reason to doubt it—
16		we can see that the argument is not sound: qualifying commercial and industrial customers
17		have not been enticed to participate in the MBDR program by increased energy prices in the
18		market (SPP). Simply put, if it were true that increased market prices would make the
19		Company's MBDR program more appealing to qualifying commercial and industrial
20		customers, then there would have been some participation at this point. Yet, since there has
21		been none, it is not true that increased market prices for energy make the Company's MBDR
22		tariff more appealing to customers.
23	Q.	Does that mean that Ms. Winslow's recommendation that the tariff MW threshold be
24		lowered to include smaller commercial customers is a good one?
25	A.	It does not mean this. Lowering the MW threshold for participating customers is irrelevant

A. It does not mean this. Lowering the MW threshold for participating customers is irrelevant to the participation of customers that qualify under the current terms of the tariff. Given that the tariff is not appealing to the currently qualifying customers even with increased energy prices in the market, it is not unreasonable to infer that it will not be appealing to customers

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¹ See Schedules JS-S-1 through JS-S-4.

1 2		that would qualify under the proposed MW threshold. If it were appealing all along to customers that would qualify under the lower MW threshold, then why did the Company not	
3		create the tariff with the lower threshold originally? The Company does not offer any	
4		documents or other information that shows why the original MW threshold was not set lower.	
5	Q.	What are Ms. Winslow's arguments for (ii)?	
6	A. Her first argument in this group, A., can be stated as follows:		
7		(1) Allowing unregulated aggregators and demand-side management companies to	
8	operate in Missouri would make demand-side management in the state of Missouri		
9		unregulated for those companies	
10		(2) Unregulated companies are not, or are not completely, governed by consumer	
11		protections	
12		(3) Therefore, unregulated aggregators and demand-side management companies	
13		should not be allowed to operate in Missouri	
14		Although this may be a problem is some sectors, and in the energy sector in general, I do not	
15	see what Ms. Winslow is worried about. Having given no details about just what consumer		
16	protections would need to be put in place for unregulated demand-side management		
17	companies, I am not sure what potential abuses she has in mind. Furthermore, unregulated		
18	aggregators and demand-side management companies operate in many states, including those		
19		with vertically integrated, regulated utilities, without any issues at this time. ²	
20		The remaining arguments in Ms. Winslow's rebuttal testimony for (ii) are really just	
21		empirical claims. I will address these now. Ms. Winslow claims that in free-market programs	
22		the burden of system costs is shifted from participating customers to non-participating	
23		customers. She describes these free-market programs as those "in which a customer's demand	
24		response is submitted as a bid in the wholesale market as an alternative form of supply[.]" ³	
25	Firstly, Ms. Winslow has not provided any supporting information, analysis, or description of		

² These states include West Virginia, Oklahoma, and Kansas. See Voltus, Inc., Voltus Comments on Order Offering an Opportunity to Comment Regarding Modification of Temporary Ban on Aggregators for Commercial and Industrial Customers, EW-2021-0267.

³ Kimberly Winslow, Rebuttal Testimony, ER-2022-0129 & ER-2022-0130, p 21.

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program design that would show this to be true. Furthermore, and more importantly, Ms. Winslow has not described a different procedure than that detailed in the MBDR tariff sheets. On P.S.C. MO. No. 7, Fifth Revised Sheet No. 26 of the MBDR program, the purpose of the Schedule MBDR is to offer "qualified business demand response...participants an additional opportunity to reduce their electric costs through participation with KCP&L in the wholesale Southwest Power Pool...energy market by providing load reduction during high price periods in the market and declared emergency events." On P.S.C MO. No. 7, Fifth Revised Sheet No. 26A of the MBDR, On P.S.C. MO. No 7, Fourth Revised Sheet No. 26B of the MBDR program, it is stated that "The Company will notify the Participant of all Offers accepted by SPP. The Participant shall be responsible for acting upon a cleared offer and is obligated to reduce load in accordance with the SPP instructions." The MBDR program appears to be almost identical to a program "in which a customer's demand response is submitted as a bid in the wholesale market as an alternative form of supply." If the MBDR program, as described, does not shift costs from participating to non-participating customers, then neither will free-market programs. If free-market programs shift costs from participating to nonparticipating customers, then, because they are the same as the MBDR program, the latter also shifts costs from participating to non-participating customers. Ms. Winslow must fall on one horn of the dilemma in order to avoid the other, and thus the point of her objection to lifting the ban on ARCs is lost on me.

Ms. Winslow also claims that "the proposed Emergency Conservation Plan tariff already includes provision to call demand response when SPP issues its load alerts,"⁴ making my recommendation "that the Emergency Conservation Plan tariff sheets be amended to include demand response in load curtailment events during emergency conditions"⁵ superfluous. The Emergency Conservation Plan tariff sheets do currently have provisions about customer load curtailment in response to SPP load alerts. But, the point of my recommendation is to include in these tariff sheets the requirement that the Company also consider demand response—which is load curtailment events in relation to price signals or

⁴ Kimberly Winslow, Rebuttal Testimony, ER-2022-0129 & ER-2022-0130, p 22. ⁵ Jordan Seaver, Direct Testimony, ER-2022-0129 & ER-2022-0130, p 2.

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economic considerations—in the Emergency Conservation Plan. The distinction I am highlighting between load curtailment under the Emergency Conservation Plan and load curtailment in the form of demand response is an economic one: the tariff sheets need to contain provisions for load curtailment when market prices go above a certain price ceiling. I do not disagree with Ms. Winslow that there are currently provisions in the Emergency Conservation Plan to curtail load when SPP issues load alerts, but I only stress that the tariff sheets should contain explicit mention of load curtailment in relation to price signals in the absence of such alerts.

Q. Do you have any other comments to the arguments posed by Ms. Winslow?

A. I do. There are a number of points in Ms. Winslow's rebuttal testimony where she criticizes the idea of adopting a free-market for the aggregation of demand response load curtailment events and demand response for large commercial, small commercial, and industrial customers. There has been considerable interest by unregulated companies to offer demand response and aggregation of demand response in Missouri. In the docket that she herself cites,⁶ Voltus, CPower, and Walmart expressed their support for the Commission lifting the ban on ARCs. In the comments submitted by Walmart, it is pointed out that Evergy operates in Kansas as well as Missouri⁷. Kansas allows ARCs to operate, meaning that Evergy operates alongside ARCs in Kansas. Neither Ms. Winslow nor any other Company witness claims that Evergy demand response in Kansas is inhibited or negatively affected by the operation of ARCs in that state. Ms. Winslow also does not point out any abuses of consumers by ARCs that operate in Kansas. If there were such abuses, or if Evergy operations were negatively affected, I believe that Ms. Winslow or any other Company witness would have brought these to the attention of the Commission. Because Ms. Winslow does not present any evidence for her claims that lifting the ban on ARCs would lead to consumer abuse and negatively affect Evergy's operations, I believe these concerns are raised to appeal to emotion and not based in reality.

⁶ EW-2021-0267

⁷ Walmart, Inc., Comments of Walmart to Commission Order Offering An Opportunity To Comment Regarding Modification Of Temporary Ban On Aggregators For Commercial And Industrial Customers, EW-2021-0267.

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III. RESIDENTIAL BATTERY ENERGY STORAGE PILOT PROGRAM ("RBES")

Q. What is Ms. Winslow's position on your recommendation that the RBES program be rejected by the Commission?

Ms. Winslow's position on my recommendation is that the RBES program is necessary for 4 A. 5 the Company to understand how batteries will function in their service territory, how they will 6 be called on by the Company, and what some undefined future program may look like. She claims that the batteries must be identical in order to "standardize battery sizing and design 7 across all participants"⁸ which will "reduce uncertainty and ensure consistency in data used 8 to determine results."⁹ Of utmost importance for the pilot study is the specificity of the design 9 10 for the batteries, their location, and the behavior of the customers in whose homes they will be installed. 11

12 Q. Do you hold the same position as Ms. Winslow on these requirements?

I do not. If it is true that the batteries must be identical, and that the specificities of the location, A. operation, etc. is of utmost importance to learn about future company programs or operations of BTM systems in its service territories, then any data collected will therefore only be relevant to programs and operations that conform to the same conditions. This means that any future program designed by the Company will require homogeneity across BTM systems, locations, and operations. But this means that any future program will require deployment of BTM systems by the Company, similar to the proposed RBES study. Proposed costs for the pilot are \$2.4 million. Dividing this total by 50 puts the individual BTM system costs (including installation, software, and operation) at roughly \$48,000. Were the Company to expand this pilot in the future to any program that would benefit from the rigid standards and specifications of the data gathered, the costs would be enormous. Installing only 1,000 BTM systems across the Evergy Missouri Metro and Evergy Missouri West service territories would cost roughly \$48 million. Increasing that to a number of BTM systems capable of having a positive effect on load or on energy savings would make the price of such a program untenable. All examples of BTM storage systems used to affect load or to lower costs on

⁹ Ibid.

⁸ Kimberly Winslow, Rebuttal Testimony, ER-2022-0129 & ER-2022-0130, p 24.

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24 25 energy have used batteries with energy capacities measured in MWh, not in kWh as the company's program is designed. Thus, *e.g.*, if we increase the number of BTM systems for a future program to 5,000 (which would equal roughly 97 MWh of storage) the total program cost would rise to roughly \$240 million. Because such high costs must be incurred to begin to see the utility of BTM systems on a wide scale as well as economic benefits to customers, such money would be better spent on new generation to cover gaps caused by decommissioning of the Company's coal plants.¹⁰

8 Q. Does your original recommendation for a meta-study or literature review respond to 9 Ms. Winslow's objections?

A. Yes, it does. If the goal of the Company is to install Company-owned BTM storage systems in the homes of residential customers, the cost is prohibitive and higher than any potential savings. Because the cost to provide identical batteries to residential customers is prohibitive, there is no need for the RBES pilot, because there will be no large scale deployment of Company-owned BTM systems in the Company's service territory. On the other hand, if the Company is intending to study how to utilize customer-owned BTM storage systems, then the meta-study or literature review should be sufficient to gain knowledge of what does and does not work generally regarding different BTM storage systems, differing operation strategies, and different geographical and climatic conditions in the areas of deployment. The customerowned BTM storage system population would be heterogeneous, and any results from a study that utilized identical BTM storage systems would not be generalizable in all relevant ways to the reality of the Company's service territory and customer systems. Further, given that Company deployment of BTM systems is cost-prohibitive, and that widespread customerowned BTM systems will take time, any study conducted on BTM systems being produced now would likely not include important features of BTM systems in the future that benefit from technological advance.

¹⁰ See "Grid-Scale Battery Storage FAQ" for examples of battery storage systems being used at grid scale. These are not BTM systems, and likely have faster and more efficient deployment, but the point of comparison here is that the goal of making an impact at the grid level with energy storage systems requires large amounts of batteries. "*Grid-Scale Battery Storage FAQ*," National Renewable Energy Laboratory, September 2019, nrel.gov/docs/fy19osti/74426.pdf.

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IV. LOW INCOME SOLAR SUBSCRIPTION PILOT ("SCHEDULE LI SSP") SHAREHOLDER COST SHARING COMPONENT

Q. What are Ms. Winslow's objections to your recommendation that the Company's shareholders cover 90% of the costs of the unsubscribed portion of the solar PV array for the proposed LI SSP?

6 A. Ms. Winslow explains that the reason the Schedule SSP contains a cost sharing mechanism is that the solar resource that was needed to meet the expected future demand of the Schedule 7 SSP was not available when the program was proposed. Because of this, if there was a 8 possibility that as the solar resource was built, the demand would not immediately catch up. 9 10 In the event of this happening, the cost-sharing mechanism would allow the Company to fund the solar resource before the demand to cover costs was met. Contrary to this, Ms. Winslow 11 states that the solar resource for the LI SSP will already be built according to plans under 12 section 393.1665 RSMo. Because of this, the costs will be covered by all customers upon 13 construction of the solar resource but then "an accounting adjustment will be made that will 14 shift the cost burden from all Evergy Missouri Metro and Evergy Missouri West customers 15 to customers of the LIS program [i.e., LI SSP]"¹¹. 16

17 Q. Does Ms. Winslow's response address the concern that led you to recommend the cost 18 sharing mechanism?

A. It does not. The cost-sharing mechanism was not proposed because of concerns about the timing of the construction of the solar resource. The reason for the recommendation that the LI SSP contain a cost-sharing mechanism of 90% for the Company and 10% for the participating customers is that the LI SSP is inherently risky for participating customers. The structure of the rates for participating customers is designed to be artificially low for the first years of participation and then to increase in later years. Because the LI SSP is for low-income customers, it is likely that there will be a drop off in participation later in the program's existence. This is due to the fact that what participating customers pay is designed to grow as time goes on. Thus, the proposed cost-sharing mechanism is a safeguard for non-participating customers in the event that much of the costs of the solar resource must eventually be covered

¹¹ Kimberly Winslow, Rebuttal Testimony, ER-2022-0129 & ER-2022-0130, p 29.

by someone other than the participating customers. I propose that the shareholders should be burdened with most of that cost in the future if the Company insists on providing the LI SSP as designed.

Q. Do you have any other comments about the proposed LI SSP?

A. 5 The LI SSP devotes a very small solar resource to a very small number of customers for whom 6 the priority is most likely not choosing which kind of generation they are paying for. These customers want affordable, reliable service, not an advertising campaign that claims they are 7 having their energy met by this specific solar resource. When asked a question in the Evergy 8 Missouri West securitization case, Company witness John J. Reed stated¹² that all of the 9 Company's generation is sold into SPP, and all of the Company's load is met by purchasing 10 power from the SPP at locational marginal prices. If this is true, and I have no reason to doubt 11 that it is, then it is false advertising to tell low-income customers that they are getting their 12 energy from solar panels, when in reality they are merely paying for those solar panels to 13 generate for Evergy. If the Company wants to provide its customers with solar energy, then 14 I recommend that the Company build more solar resources in order to meet that demand and 15 in order to meet it reliably, which will require building more than 10 MWac of solar PV. If a 16 program like the LI SSP cannot be provided to a large customer base, then I believe that such 17 an approach to employing renewable energy sources is misguided. And if an approach to 18 providing them so that all customers can benefit is too expensive and comes with reliability 19 issues-which I suspect is the case-then I recommend that such programs be avoided. 20

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Q. What arguments does Philip Fracica make regarding the LI SSP?

Mr. Fracica recommends that the LI SSP should utilize federal Weatherization Assistance
 Program ("WAP") dollars to fund the solar PV.

24 Q. Do you agree with this recommendation from Mr. Fracica?

A. I do not. The DOE is not under the authority of the Commission. The Commission does not have the authority to direct the DOE's actions on this matter. In addition to this, the DOE is not a party to this case. Regarding the specific proposal Mr. Fracica makes, it is unclear from

¹² Tr. Vol. 2, p 261, lines 6-21, EF-2022-0155.

the WAP Memorandum 024 whether LI SSP would even qualify for funding with WAP dollars. As such, I do not believe that the LI SSP can or should be funded with WAP dollars.

Q. Does this conclude your testimony?

A. Yes.

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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

AFFIDAVIT OF JORDAN SEAVER

STATE OF MISSOURI)) COUNTY OF COLE)

Jordan Seaver, of lawful age and being first duly sworn, deposes and states:

SS

1. My name is Jordan Seaver. I am a Policy Analyst for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

ordan Seaver

Policy Analyst

Subscribed and sworn to me this 16th day of August 2022.



TIFFANY HILDEBRAND My Commission Expires August 8, 2023 Cole County Commission #15637121

Idund

Tiffany Hildebrand Notary Public

My Commission expires August 8, 2023.