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Witness: Craig E Brown
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Sponsoring Party: Evergy Missouri Metro / West
Case No.: ER-2022-0129 / 0130

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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2022-0129 / 0130

REBUTTAL TESTIMONY

OF

CRAIG E. BROWN

ON BEHALF OF

EVERGY MISSOURI METRO and EVERGY MISSOURI WEST

Kansas City, Missouri July 2022

REBUTTAL TESTIMONY

OF

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Case No. ER-2022-0129 / 0130

1 Q: Please state your name and business address. 2 A: My name is Craig E. Brown. My business address is 9400 Ward Parkway, Kansas City, 3 Missouri 64114. 4 By whom and in what capacity are you employed? Q: 5 A: I am employed by 1898 & Co., a division of Burns & McDonnell Engineering Company, 6 Inc. (hereinafter called "1898 & Co."), as a Project Manager in the Financial Analysis and 7 Rate Design department. 1898 & Co. is a business, technology and security solutions 8 consulting firm serving multiple industries, including the electric power industry. As a part 9 of Burns & McDonnell ("BMcD"), 1898 & Co. draws on over 120 years of experience. 10 What is your professional experience? Q: 11 A: For the past 18 years, I have worked as a consultant, project manager, expert witness, and 12 analyst on utility financial, rate, and regulatory projects. After joining Burns & McDonnell 13 in 2019 I have focused primarily of cost of service, rate, and regulatory consulting for 14 electric utilities. Prior to joining Burns & McDonnell, I worked for 15 years in the Rate 15 and Regulatory practice at Black & Veatch Management Consulting, where I was a 16 Principal Consultant and Rate and Regulatory Team Lead consulting on projects for

electric, gas, water, and wastewater utilities. Prior to joining Black & Veatch in 2004 I was

employed as an accountant and small business consultant at independent firms in Overland

Park, Kansas and Phoenix, Arizona.

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As a Project Manager for the Financial Analysis and Rate Design department of 1898 & Co., I lead consulting projects for investor-owned, municipal, and cooperative utilities across the country. In addition to ratemaking issues, I lead projects in the areas of depreciation and valuation, financial and load forecasting, and cost-benefit business case analysis. My resume is attached as Exhibit CEB-1.

Have you previously testified in a proceeding at the Missouri Public Service Commission ("MPSC" or "Commission") or before any other utility regulatory agency?

I have not testified in a proceeding at the Missouri Public Service Commission; however, I have previously filed testimony and/or appeared as an expert witness before the Federal Energy Regulatory Commission (FERC), the Public Service Commission of Maryland, the Public Utilities Commission of Minnesota, and the Kansas City Board of Public Utilities. The majority of my experience leading electric cost of service and rate related studies has been for electric cooperative and municipal utilities that have not required testimony or appearing as an expert witness. I have made numerous presentations and supported cost of service, rate design, and other regulatory studies to Utility Boards and Commissions and/or City Councils in Kansas, Missouri, Nebraska, Delaware, Florida, Kentucky, Maryland, Nevada, New York, North Carolina, Texas, Virginia, and Washington.

19 Q: On whose behalf are you testifying?

Q:

A:

20 A: I am testifying on behalf of Evergy Metro, Inc. d/b/a Evergy Missouri Metro ("Evergy Missouri Metro") and Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("Evergy Missouri West") (collectively, the "Company").

1 Q: What is the purpose of your rebuttal testimony?

- 2 A: The purpose of my rebuttal testimony is to respond to topics related to the Company's
- 3 Class Cost of Service ("CCOS") studies and issues raised by Midwest Energy Consumers
- 4 Group ("MECG") witness Maini and Staff witness Lange.
- 5 Q: Please summarize the issues raised by MECG witness Maini that you will address in
- 6 your rebuttal testimony.
- 7 A: I will address Ms. Maini's use of a production and transmission demand allocators based
- 8 on Average and Excess Demand Four Non-coincident Peak ("A&E 4NCP") and not the
- 9 Company's allocator of Average and Excess Demand Four Coincident Peak ("A&E
- 10 4CP").

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- 11 Q: Please describe the Company's A&E 4CP allocator and the rationale for its use in this
- 12 proceeding.
- 13 A: While there appears to be general consensus, both in this case and other recent cases before
 14 the Commission that Average and Excess demand is the appropriate capacity allocator for
 15 regulated utilities in the state, I will focus on the 4CP versus 4NCP decision. The primary
 16 consideration is related to cost causation for production and transmission plant. It is well
- transmission investment decisions are primarily driven by the need to provide peak

established that the company is a summer peaking utility, and its production and

- 19 capacity in the four summer months (June September). The appropriate sizing of this
- 20 investment is based on the coincident peak demands of the customer classes. If Evergy
- sized its generation fleet based on the non-coincident peak needs of each customer class, it
- 22 might oversize its generation fleet and transmission facilities. Basing investment decisions
- on the class CP results in a more efficient use of capital and lower overall costs for Evergy

1		customers. As such, I apply the same rationale for the excess portion of the A&E allocator
2		as Evergy uses in its investment decisions and recommend 4CP as a basis for the excess
3		portion of Evergy's A&E allocation factor.
4	Q:	What is Ms. Maini's rationale for using A&E 4NCP?
5	A:	While she acknowledges that the results using either method are generally consistent, she
6		states that "the method prescribed in the NARUC manual for the A&E method, however,
7		appears to encourage the use of non-coincident peak demands (NCP) and is also a more
8		common approach used by other Missouri utilities."
9	Q:	Is the A&E 4NCP allocation method as proposed by Ms. Maini included in the 1992
10		NARUC Cost Allocation Manual?
11	A:	No, it is not. The example presented in the Manual uses 1NCP. 4NCP is not mentioned.
12	Q:	Does this reduce the validity of Ms. Maini's proposed allocation method for
13		production and transmission capacity?
14	A:	No, it does not. Both the Company and Ms. Maini have proposed a hybrid of the guidelines
15		presented in the Manual. Both methods could be acceptable allocations approaches. The
16		question is which version is more appropriate for the Evergy production and transmission
17		systems.
18	Q:	What does the NARUC manual state as the rationale that NCP is preferential to CP
19		when calculating Average and Excess Demand allocations?
20	A:	It states on page 50 that using a CP allocation factor with A&E will result in allocation
21		factors that are identical to those derived with a direct CP allocation. As seen in the
22		comparison in Table 1 below, while similar, the allocation factors using A&E 4CP and the
23		4CP allocations are different.

Table 1: Comparison of Production Allocation Factors

Allocation	Res	SGS	MGS	LGS	LPS	SL	CCN	Total
A&E 4CP	45.98%	7.14%	14.17%	19.59%	12.59%	0.52%	0.01%	100.00%
A&E 4NCP	44.92%	6.89%	14.24%	20.00%	12.74%	1.21%	0.01%	100.00%
4CP	44.94%	7.13%	14.26%	20.19%	13.48%	0.00%	0.01%	100.00%

Allocation	Res	SGS	MGS	LGS	LPS	SL	CCN	Total
A&E 4CP	45.98%	7.14%	14.17%	19.59%	12.59%	0.52%	0.01%	100.00%
A&E 4NCP Maini	44.39%	6.88%	14.24%	20.19%	13.09%	1.20%	0.01%	100.00%
A&E 4NCP Lange	44.92%	6.89%	14.24%	20.00%	12.74%	1.21%	0.01%	100.00%
4CP	44.94%	7.13%	14.26%	20.19%	13.48%	0.00%	0.01%	100.00%

4 Q: What conclusions can you draw from the above Table 1.

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- First, this demonstrates that use of a CP method for the excess portion with A&E does not produce a result that is identical to the direct CP method. Therefore, the rationale against its use that is purported in the NARUC manual is flawed. Second, it is notable that all threeboth of the A&E allocations presented are quite similar to the 4CP allocation. In fact, for many classes, the A&E 4NCP method is closer to the 4CP allocation than the A&E 4CP method.
- 11 Q: Are either the A&E 4CP or A&E 4NCP methods inherently wrong for use in Evergy's rate case?
- 13 A: No. I agree with Ms. Maini's statement on page 20 of her testimony: "While the general approach is included in the NARUC manual, the manual appears to leave some discretion to the analyst regarding the specifics of application."
- 16 Q: Why is the proposed A&E 4CP method proposed by the Company a superior method in this rate case?
- 18 A: The A&E 4CP method is superior to A&E 4NCP because it is more reflective of how the
 19 Company plans its investment in production and transmission plant. That is, the Company
 20 bases these decisions on the CP requirements of the system, not the NCP requirements.

ı		Further, it is the four summer months from June through September that are the primary			
2		factors, and therefore the primary cost causative factors for the Company's production and			
3		transmission investments are Average and Excess Demand with a 4CP excess component.			
4	Q:	Is there any precedent for using the A&E 4CP method?			
5	A:	Yes, there is. First and foremost, A&E 4CP was used in the company's most recent rate			
6		case before the Commission in 2018 (Case No. ER-2018-0145 and ER-2018-0146). A&E			
7		4CP is also the accepted allocation method for what is now Evergy's Kansas Central			
8		jurisdiction. A&E 4CP is the accepted allocation method for production capacity costs			
9		resulting from Westar Energy's most recent rate case before the Kansas Corporation			
10		Commission (Docket No. 18-WSEE-328-RTS).			
11	Q:	Please summarize the issues raised by Staff Witness Lange that you will address in			
12		your rebuttal testimony.			
13	A:	I will address two issues raised by Ms. Lange:			
14		1. The underlying cost causation of newer components of revenue requirement that			
15		are not explicitly considered in the 1992 NARUC Cost Allocation Manual, and			
16		2. Ms. Lange's use of a production demand allocator based on A&E 4NCP and not			
17		the Company's allocator of A&E 4CP.			
18	Q:	Please describe the first issue raised by Ms. Lange.			
19	A:	On page 30 of her direct testimony, Ms. Lange has the following Q&A:			
20 21 22 23		Q: What is the underlying causation of newer components of revenue requirement, such as Plant in Service Accounting deferrals, or generation deployed to meet environmental goals or achieve profits in the SPP integrated marketplace?			
24 25 26 27		A: These revenue requirement components do not appear to have been a consideration in the 1992 NARUC Cost Allocation Manual. As a kWh of energy is the basic unit of the service an electric utility provides, these costs and expenses are best allocated on the basis of energy sales.			

Ms. Lange appears to imply that any revenue requirements that are not explicitly defined or considered in the 1992 NARUC Cost Allocation Manual should be allocated on the basis of energy sales and not the principles of cost causation that underly the cost of service concepts presented in the manual.

Is this an appropriate rationale to allocate costs in a class cost of service study?

A: No, it is not. To choose kWh of energy as the appropriate allocation basis simply because it "is the basic unit of the service an electric utility provides" completely undermines the entire purpose of developing a cost of service study based on cost causation principles.

Why is cost causation important?

Q:

Q:

A:

Q:

A:

Cost causation is the key element to selecting an allocation factor. This has been the standard by which an allocation method is evaluated, and it continues to be the gold standard for assessing cost allocation. The principle of cost causation is also relevant for analysis within classes of customers where each customer should, on average, have rate revenues that match the cost of service for that customer.

Is there a better approach to cost allocation for new costs that have not been explicitly considered in the 1992 NARUC Cost Allocation Manual?

Yes. The NARUC Manual presents a process for cost allocation and the concept of cost causation is the primary factor. When a cost analyst identifies a cost, or category of costs, that are not well defined in the Manual, the analyst should apply the principles described in the Manual to make a rational decision on what cost causation principles apply to the cost. First the analyst should identify if the cost can be assigned using an external allocator with a function of production, transmission, distribution, or customer and further, if that function can be classified as being caused by energy, demand, or customer. If an external

1	allocation factor cannot be identified with confidence, application of an internal allocation
2	factor will likely be necessary.

- 3 Q: Do cost causation principles still apply when selecting an internal allocation factor?
- 4 Yes. Ms. Lange uses Plant in Service Accounting deferrals as an example of costs that A: 5 were not previously considered and should be allocated on a basis of energy. Evergy's 6 investment in plant, whether for production, transmission, distribution, or general plant, is 7 never based on the amount of kWh throughput on its system or eventual energy sales to 8 customers. As such, energy should not be used to allocate plant in service accounting 9 deferrals. The nature of the cost should dictate the allocation method. In the case of plant 10 in service accounting deferrals, the internal allocation factor based on total plant in service 11 is the logical choice.
- 12 Q: How should the Commission address costs that were not explicitly considered in the 13 1992 NARUC Cost Allocation Manual?
- 14 A: The Commission should apply the same principles of cost causation described in the 1992

 15 NARUC Cost Allocation Manual to rationally evaluate new costs and develop an

 16 appropriate allocation based on cost causation principles.
- 17 Q: Please describe the second issue raised by Ms. Lange in her direct testimony that you18 will address.
- I will address Ms. Lange's choice of production capacity allocator. In her testimony on page 35 she states "...I used an Average and Excess allocator. However, I used an A&E 4CP allocator consistent with the 1992 NARUC Cost Allocation Manual, which differs from the A&E 4NCP allocator developed by the Company." I understand that there is a typographical error in the above sentence and Ms. Lange intended to state, "I used an A&E

1		4NCP allocator consistent with the 1992 NARUC Cost Allocation Manual, which differs
2		from the A&E 4CP allocator developed by the Company." In reviewing Ms. Lange's
3		supporting workpapers, she has applied an A&E 4NCP allocator for production capacity.
4	Q:	Do any of your arguments supporting the use of A&E 4CP related to Ms. Maini's
5		testimony differ for your response to Ms. Lange's testimony?
6	A:	No, they do not. I continue to support the use of the A&E 4CP method as the best choice
7		for the Company to allocate production and transmission capacity costs.
8	Q:	Are there any differences between the A&E 4NCP proposed by Ms. Lange and the
9		A&E 4NCP proposed by Ms. Maini?
10	A:	Yes, there are. While both versions use the same 4NCP class values to determine the excess
11		portion of the allocator, they use different values for the system load factor. Ms. Maini uses
12		the sum of class 4NCP values in the calculation of system load factor (1,007 MW / 1,791
13		MW = 56.2%) whereas Ms. Lange uses the Evergy Metro system peak (1CP) for the system
14		load factor (1,007 MW / 1,859 MW = 54.2%). This results in Ms. Maini's method
15		allocating slightly more on the basis of average demand than Ms. Lange.
16	Q :	Which method is correct?
17	A:	Neither are inherently wrong and, as demonstrated in Table 1 in my rebuttal testimony, the
18		results using either method are very close. However, as both witnesses purport to apply
19		the method prescribed in the 1992 NARUC Cost Allocation Manual, I would say Ms.
20		Lange's version is truer to the Manual. As described in the Notes section of Table 4-10A
21		of page 50 of the Manual, the example determines the system load factor using the 1CP
22		system peak.

Q: Please summarize your testimony.

- 1 A: (1) The Commission should use a class cost of service study that allocates production and
- 2 transmission capacity costs based on the Average and Excess Demand 4 Coincident Peak
- 3 (A&E 4CP) method as proposed by the Company.
- 4 (2) When faced with new components of revenue requirements that are not explicitly
- defined with an allocation method in the 1992 NARUC Cost Allocation Manual, the
- 6 Commission should rely on a class cost of service that attempts to use a rational approach
- 7 to developing an allocation factor that is rooted in the cost causation principles presented
- 8 in the Manual.
- 9 Q: Does that conclude your testimony?
- 10 A: Yes, it does.