

**Exhibit No.:** \_\_\_\_\_  
**Issue(s)** Demand Response Programs  
**Witness/Type of Exhibit:** Marke/Surrebuttal  
**Sponsoring Party:** Public Counsel  
**Case No.:** EO-2020-0227

**SURREBUTTAL TESTIMONY**

**OF**

**GEOFF MARKE**

Submitted on Behalf of the Office of the Public Counsel

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

CASE NO. EO-2020-0227

October 14, 2020

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of the Second Prudence )  
Review of the Missouri Energy Efficiency )  
Investment Act (MEEIA) Cycle 2 Energy ) File No. EO-2020-0227  
Efficiency Programs of Evergy Metro, Inc. )  
d/b/a Evergy Missouri Metro )

**VERIFICATION OF GEOFF MARKE**

Geoff Marke, under penalty of perjury, states:

1. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony in the above-captioned case.
2. My answer to each question in the attached surrebuttal testimony is true and correct to the best of my knowledge, information, and belief.

  
\_\_\_\_\_  
Geoff Marke  
Chief Economist

## TABLE OF CONTENTS

<b>Testimony</b>	<b>Page</b>
Introduction	1
Overview of Positions	2
Clarification on Programs	4
Reasonable Standard for a Prudence Review	9
Cost Effectiveness	10
Tariff Language	11
SPP Capacity Sales and Fee Proxy	12

**SURREBUTTAL TESTIMONY**

**OF**

**GEOFF MARKE**

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

**CASE NO. EO-2020-0227**

1 **I. INTRODUCTION**

2 **Q. Please state your name, title and business address.**

3 A. Geoff Marke, PhD, Chief Economist, Office of the Public Counsel (OPC or Public Counsel),  
4 P.O. Box 2230, Jefferson City, Missouri 65102.

5 **Q. Are you the same Geoff Marke that filed rebuttal testimony on behalf of OPC?**

6 A. Yes.

7 **Q. What is the purpose of your rebuttal testimony?**

8 A. I will be responding to the rebuttal testimony of Evergy Missouri West and Evergy Missouri  
9 Metro (“Evergy”) witnesses Brian A. File and John R. Carlson. My testimony provides a brief  
10 overview of the various positions of parties and includes some needed clarification on the  
11 programs and terms in question in response to Mr. File’s testimony. I then respond to the  
12 following counter-arguments raised by the witnesses to Staff’s report including:

- 13 • Programs adhered to the reasonable standard in prudence;
- 14 • Commission should not impose cost disallowances on cost effective programs;
- 15 • Programs were operated as designed; and
- 16 • Assuming capacity sales and fees from the Southwest Power Pool as a proxy for  
17 disallowance is inappropriate.

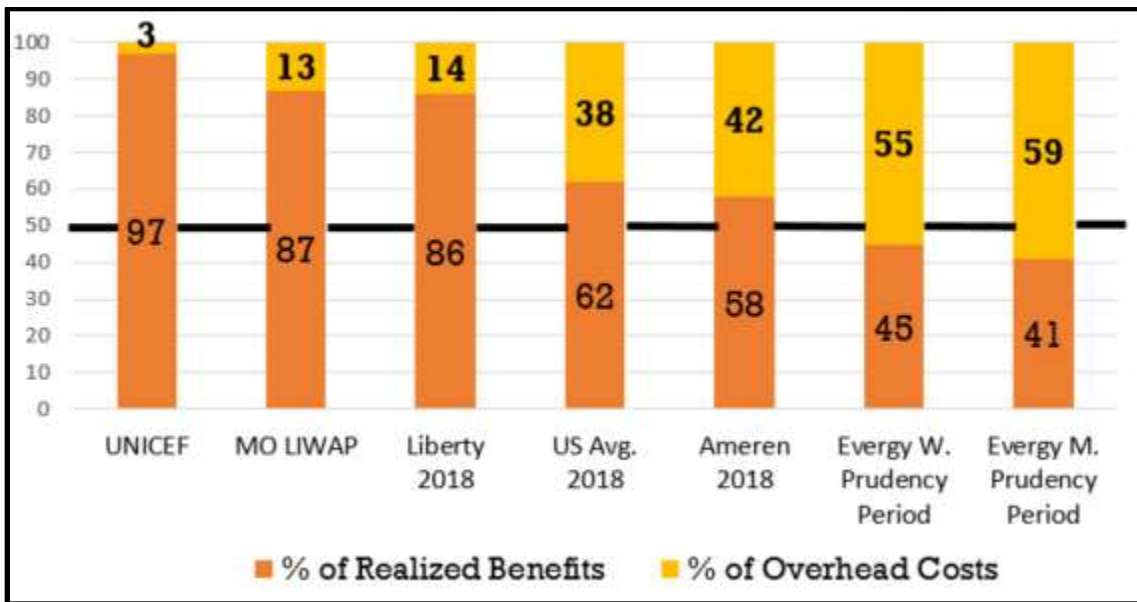
18 My silence regarding any issue should not be construed as an endorsement of, agreement with,  
19 or consent to any other party’s filed position.

1 **II. OVERVIEW OF POSITIONS**

2 **Q. What is OPC’s position?**

3 A. I recommended in rebuttal that the Commission support Staff’s position and disallow an  
4 additional \$1,930,392 for Evergy Missouri West for a total disallowance across the two utilities  
5 of \$6,429,139.74. The sum of these disallowances results in a 50/50 ratio of program overhead  
6 costs relative to actual energy efficiency measures during the prudence review period across  
7 both utilities. I consider 50% the minimum amount of acceptable management inefficiency for  
8 this prudency period even though it still results in more than a 12% inefficient ratio relative to  
9 the 2018 US average ratio. A breakdown in program overhead costs relative to realized benefits  
10 across organizations cited in my rebuttal testimony is summarized in Figure 1 with an  
11 emphasized line denoting the 50% threshold.

12 Figure 1: Select program overhead to realized benefits across organizations cited in rebuttal testimony



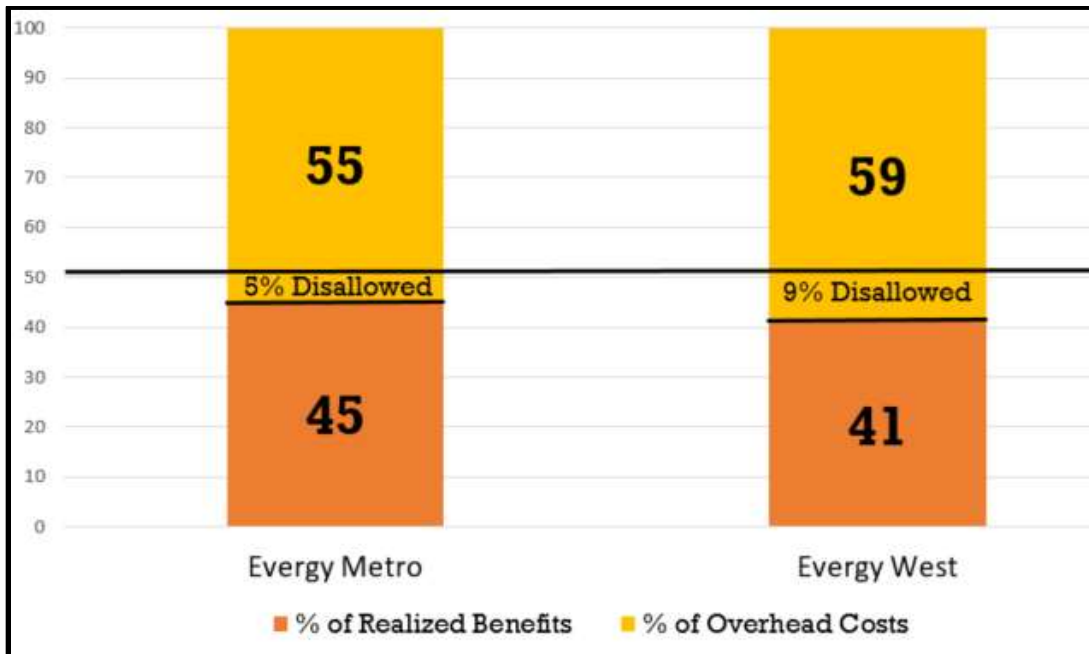
13 Staff’s disallowance centers primarily on Evergy’s managerial imprudence related to demand  
14 response programs; however, if Staff’s recommended disallowance is completely adopted the  
15 expenditure ratio on non-energy efficiency measures would still be above 50% in total.  
16 Although I support Staff’s recommendations, I do not believe this amount goes far enough  
17 because it fails to address the worst managerial inefficiencies of Evergy. In fact, according to  
18

1 Energy Information Administration (“EIA”) data out of 515 utilities reporting with energy  
2 efficiency programs in 2018, Evergy Metro had the 23rd worst ratio and Evergy West the 19th  
3 worst ratio in terms of non-incentive costs relative to incentive cost expenditures across the  
4 United States. That is, approximately 500 utilities' management did a better job of ensuring  
5 their energy efficiency budget resulted in tangible energy efficiency actions.

6 **Q. Has OPC’s position changed since rebuttal testimony?**

7 A. No. I support Staff’s position, and I believe Evergy’s demand response programs are imprudent  
8 and resulted in financial harm to ratepayers. However, a disallowance to 50/50 ratio in realized  
9 measures to non-realized measures of total costs is my primary recommendation. This can be  
10 accomplished, in part, by the Commission supporting Staff’s disallowance and an additional  
11 \$1,930,392 disallowance for Evergy Missouri West. The 50/50 breakeven disallowance  
12 recommendation remains regardless of whether or not the specific cost disallowance is  
13 explicitly attributable to the demand response programs. Figure 2, provides an illustrative  
14 example of my disallowance.

15 Figure 2: OPC percentage of disallowance for 50/50 ratio of realized benefits to overhead costs



1 The emphasis of this prudence review pertains to Evergy's failure to utilize the demand  
2 response infrastructure resulting in financial harm to its captive ratepayers, but a larger and  
3 more disconcerting narrative is Evergy's managerial inefficiencies in handling its multi-million  
4 dollar budget relative to its peers and compared to utilities across the United States.

5 A failure to address these managerial inefficiencies will merely perpetuate the obvious lack of  
6 agency or responsibility the Company has in ensuring captive ratepayer dollars are prudently  
7 spent. Keep in mind during the prudency period, Evergy Metro was 17% and Evergy West  
8 21% less efficient than the US average in 2018. My recommendation for cost disallowance  
9 does not even approach the US average. I am merely suggesting that a 50/50 ratio is reasonable  
10 at this point and should "hopefully" be enough to incentivize the Company to do a better job  
11 than what it has been doing.

12 **Q. What is Staff's position?**

13 A. Staff recommends a disallowance of \$2,134,986.29 for Evergy Missouri Metro ("Metro") and  
14 \$2,363,761.45 for Evergy Missouri West ("West") for a total of \$4,498,747.74 ("Evergy" and  
15 the "Company"). Over ninety-nine percent (99.28%) of this amount (or \$4,466,141) is related  
16 to its Missouri Energy Efficiency and Investment Act (MEEIA) demand response programs.

17 **Q. What is the Company's position?**

18 A. The Company disagrees with Staff and believes all of its costs are prudent and efficient.

19 **III. CLARIFICATION ON PROGRAMS**

20 **Q. What are the two types of programs in question that Mr. File's rebuttal testimony**  
21 **responds to?**

22 A. The residential and business programmable thermostat programs, and the business demand  
23 response program. Both are demand response programs but the financial mechanics and  
24 execution of savings behind them differ.

1 **Q. Please clarify what the residential and business programmable thermostat programs are**  
2 **designed to do?**

3 A. Evergy is supposed to use its residential and commercial thermostat demand response program  
4 to reduce load during peak periods to help defer future generation capacity additions and  
5 provide for improvement in energy supply. The programs are supposed to address the fact that  
6 traditional rate structures and/or lack of AMI meter technology does not provide customers  
7 appropriate incentives to reduce electricity usage during peak periods.

8 **Q. Does it do that?**

9 A. No. Not only are no future generation investments being deferred while AMI meter technology  
10 is in place and has been earning a return in base rates for a few years now, Evergy has largely  
11 ignored the program and placed it on minimal-use “autopilot.”

12 **Q. What are peak periods?**

13 A. It is the highest electrical power demand that has occurred over a specific time. Peak load can  
14 be characterized annually, seasonally, quarterly, monthly, weekly, daily, etc...

15 **Q. How does Mr. File characterize the “peak period.”**

16 A. It is not entirely clear. Judging from the number of events called I would say annually, but a  
17 more generous response may be two (maybe three more) pre-set dates seasonally. The  
18 Company’s testimony goes to great lengths to emphasize that the program is only designed to  
19 curb peak load. However, “peak load” is dependent on the time in question. Energy prices  
20 fluctuate throughout the day but there will always be a peak period of energy usage for  
21 Evergy’s customers and it is typically during the hottest time of day. Evergy retains data on  
22 its load shapes that should approximate daily, weekly, monthly, quarterly, seasonally and  
23 annual peak usage. Mr. File’s suggestion that the Company needs some level of clairvoyance  
24 that does not currently exist to accurately forecast when it’s going to be hot and when the  
25 Company should call an event on the infrastructure that ratepayers have already paid for is  
26 grossly misleading.



1 **Q. How many programmable thermostat events were called during the prudence period?**

2 A. Again, it is not clear. Staff's report differs from Evergy witness Brian File's numbers, which  
3 differ from my review of the third party EM&V contractor's numbers. I can confidently say  
4 more than one but less than six times in any given year for at least the past four years. In at  
5 least one year (2018) there were multiple thermostat programs, that is, an additional program  
6 for a very small subset of customers with programmable Ecobee thermostats was called as  
7 well. I do not have a sense of how many customers participated in said event or how many  
8 customers had been given a free thermostat or who had otherwise been rebated a thermostat  
9 from the Company over the years just that events have barely been called.

10 **Q. Should the Company clarify these numbers in sur-surrebuttal testimony and provide**  
11 **evidence to verify these figures?**

12 A. Yes.

13 The Company could simply provide that information in its sur-surrebuttal testimony for the  
14 Commission to consider. That is, how many events, per year, per program and with how many  
15 participants relative to the total number of actual programmable thermostats that have been  
16 rebated or given away for free to date for as many years as it has on record. It's important to  
17 note that Evergy's programmable thermostat programs pre-date MEEIA legislation.

18 **Q. Are there any other additional items that need clarification based on Mr. File's**  
19 **testimony?**

20 A. Yes, because Mr. File's testimony omits important context. Three things are worth pointing  
21 out about the thermostat programs.

22 First, Evergy Metro and West both have fully deployed AMI technology that it is receiving a  
23 return on and return of in rate base. Ratepayers have currently invested hundreds of millions  
24 of dollars on two sets of demand response infrastructure including: 1.) Tens of thousands of  
25 programmable thermostats<sup>1</sup> and 2.) Hundreds of thousands of AMI that are not being utilized

---

<sup>1</sup> On September 29, 2020 Evergy held its quarterly demand-side management meeting with stakeholders. At the meeting I asked how many ratepayer-funded programmable thermostats the Company estimates are currently in its

1 in any meaningful manner for customer benefits. It would be one thing if the programmable  
2 thermostats were being called frequently (beyond two times in a year) to induce benefits while  
3 customers continue to be “educated” on time-of-use (“TOU”) rates, but that has not been the  
4 case. It also remains to be seen when customers will see TOU rates rolled out. Instead, both  
5 the programmable thermostats and AMI has resulted in almost totally under-utilized, and in  
6 part, duplicative investments.

7 Second, the programmable thermostat programs (there have been multiple variations over the  
8 years) are sunk costs and/or all “up front”. That is, there are no additional costs to calling  
9 events. Participating customers have been given thermostats, additional financial incentives  
10 and have the power to override any called event.

11 Customers are given notice of pending events well in advance. They can then pre-cool their  
12 homes (if desired) and the Company then controls the thermostat to raise the temperature 3  
13 degrees for two hours. That’s it. Events called in 2018 and 2019 both occurred on June 28<sup>th</sup>  
14 and August 6<sup>th</sup> from 4:00 to 6:00 pm according to Evergy’s EM&V.<sup>2</sup>

15 There is literally no downside and only upside to calling events as there is no further  
16 reconciliation for customers that participate as all costs are sunk. Not calling events is akin to  
17 leaving money on the table. Worst still, continuing to push out more and more thermostats in  
18 the current MEEIA cycle in the same manner (i.e., that won’t get called beyond test events)  
19 will further waste ratepayer funds.

20 Finally, the energy savings attributable to the programmable thermostat by itself are not enough  
21 to justify the program. There have to be demand events called. There is also no reason that  
22 demand events could not be called every day. Again, customers can override the system and/or  
23 precool beforehand and the costs are already sunk. An event only results in participating  
24 customers experiencing three degrees hotter temperature for a couple of hours and there will,

---

Missouri territory for all programs to date. I was told that the Company estimates there are approximately 20,000 to 30,000 programmable thermostats attributable to its legacy programs and another 45,000 for its MEEIA programs.

<sup>2</sup> In 2019, according to the 3<sup>rd</sup> party EM&V report between 30% to 44% of participants adjusted their thermostat before (pre-cooled), during the event (overrode the control) or can’t remember.

1 by definition, be a peak period every day. Each event called, regardless of the number of  
2 participants should result in measureable savings that are supposed to be passed on to all  
3 ratepayers.

4 **Q. Please clarify what the Demand Response Incentive program is designed to do?**

5 A. The Demand Response Incentive (DRI) program provides financial payments to commercial  
6 and industrial (C&I) customers for curtailing energy usage during system peak demand  
7 periods.

8 **Q. What should the Commission know about these programs?**

9 A. First, there have been a number of changes to the program throughout the prudence review  
10 period to present. Namely, customers were being paid for no service rendered—“just being on  
11 call” but the program now emphasizes a pay for performance.

12 Second, like the programmable thermostats, C&I demand response contracts predate MEEIA.  
13 Additionally, there are demand response programs in place above-and-beyond MEEIA already  
14 in both Company tariffs. These tariffs were approved in the last rate case to ensure the option  
15 for MEEIA opt-out customers to participate and/or if a new MEEIA portfolio was not  
16 approved.

17 Third, in the past, the Commission has devoted a considerable amount of time to demand  
18 response in various workshops to seemingly little avail. The number of events or activity has  
19 not increased. The Commission was clear in its Report and Order in EO-2019-0132 that cited  
20 the Company’s surrebuttal report that “Additional savings from demand response reductions  
21 would increase SPP member fee savings.”<sup>3</sup> Even though calling an event should result in  
22 immediate energy and demand savings for all customers every time. If the program is not doing  
23 what it is capable of doing, then ratepayers are financially harmed.

---

<sup>3</sup> Qtd in. EO-2019-0132 Amended Report and Order p. 13. Quoting Evergy Surrebuttal Report, Exhibit 4, page 24.

1 **Q. How many events were called during the prudence period?**

2 A. Again, it's not clear. The same recommendations I made regarding the transparent accounting  
3 for the Company's historical performance to date across utilities and time should be included  
4 in the Company's sur-surrebuttal testimony.

5 **III. REASONABLE STANDARD FOR A PRUDENCE REVIEW**

6 **Q. What is the reasonable standard for a prudence review?**

7 A. As cited in Staff's Report, in this case, a prudence review uses a "reasonableness standard:  
8 "[T]he company's conduct should be judged by asking whether the conduct was reasonable at  
9 the time, under all the circumstances, considering that the company had to solve its problem  
10 prospectively rather than in reliance on hindsight. In effect, our responsibility is to determine  
11 how reasonable people would have performed the tasks that confronted the company."<sup>4</sup>

12 **Q. What is the Company's argument for meeting the reasonableness standard for its  
13 demand response programs?**

14 A. On page of 9 and 10 of Mr. File's testimony he argues, "Staff assumes a level of clairvoyance  
15 not yet in existence" that prevents the Company from calling demand response events when  
16 the weather and load forecasts are uncertain. He then alleges that Staff's hypothetical capacity  
17 contract argument is invalid because it assumes there would be buyers, at a particular price and  
18 with transmission constraints.

19 **Q. What is your response?**

20 A. Mr. File, in part, just made Staff and OPC's argument when they opposed the Company's  
21 MEEIA 3 application. Amongst other things at the time, Staff and OPC argued that there was  
22 no guarantee that the Company could reduce its SPP fees, or realize other savings, through its  
23 programs. The Commission then approved MEEIA 3 based in large part on the argument of

---

<sup>4</sup> See, Direct Testimony of Brad Fortson, Schedule BJB-d3, Second Prudence Review of Cycle 2 Costs Related to the Missouri Energy Efficiency Investment Act for the Electric Operations of Evergy Metro, Inc., April 1 through December 31, 2019, File No. EO-2020-0227, Pg. 7-8 (Quoting State ex rel. Associated Natural Gas Co. v. Public Service Com'n of state of Mo., 954 S.W.2d 520, 528-29 (Mo. 1App. W.D., 1997).

1 lower SPP fees and overall savings that must necessarily exist, yet here Mr. File is claiming  
2 the opportunity for necessary savings and reduced SPP fees is not even possible.

3 For my part, the Company is imprudent because the prudency standard was not met, period.  
4 Ratepayers invested millions of dollars in demand response infrastructure (programmable  
5 thermostats) that continues to be underutilized year-over-year. Contracts are in place for the  
6 Company's demand response incentive (DRI) program yet only test events are called. Both  
7 programs neglected to capture benefits it was designed to capture.

8 **Q. Can you think of an analogous situation to put this into perspective?**

9 A. Yes. The Commission opened dockets EW-2020-0035, EW-2020-0034, EW-2020-0033, EW-  
10 2020-0032 and EW-2020-0034 to investigate Missouri jurisdictional generator self-  
11 commitments into SPP and MISO Day-Ahead Markets. The general concern was to determine  
12 whether ratepayers were paying excessive costs by utilities management decision to run  
13 uneconomical coal plants.

14 Evergy's demand response programs is an analogous situation. Ratepayers have spent millions  
15 of dollars to have demand response infrastructure (programmable thermostats) and demand  
16 response processes (i.e., the business demand response incentive programs) in place to lower  
17 the cost of service during peak usage. Both the infrastructure and processes were designed to  
18 be run more than what was agreed to or capable of. Ratepayers, in turn, paid excessive costs at  
19 peak prices because of utilities' management decision to forgo using demand response  
20 programs and instead buy power from expensive fossil fuel plants that should otherwise not  
21 have run at the same capacity they did.

22 **IV. COST EFFECTIVENESS**

23 **Q. What does it mean if something is cost effective?**

24 A. A working definition of cost effective is something that is a good value, where the benefits and  
25 usage are worth at least what is paid for them. The devil is in the details as to what constitutes  
26 a "good value" as a cost effective analysis is dependent on the perspectives, assumptions and  
27 inputs that can lead to reasonable disagreement to outright distortion in my experience.

1 **Q. What is the Company's argument as it pertains to the cost effectiveness of the demand**  
2 **response programs?**

3 A. Mr. File cites to the cost effective scores that were agreed to during the Company's initial  
4 application and the cost-effective scores within the past EM&V reports as evidence that the  
5 programs are prudent.

6 **Q. Is the cost effectiveness ratio of a program relevant to a prudence review?**

7 A. No. The cost effectiveness ratio, regardless of the test used, is only relevant for the Company's  
8 market potential study, the Company's MEEIA application and the Evaluation, Measurement  
9 and Verification ("EM&V") results. Just because a program was cost effective under some  
10 test, under certain conditions that may or may no longer reflect reality and taken at some  
11 previous point in time with certain inputs and not others does not nullify managerial  
12 inefficiencies and imprudent actions. Mr. File's arguments regarding cost effectiveness ratios  
13 are without merit as a prudence review is not an appropriate venue for this argument. Instead,  
14 actual program implementation, managerial competence, and reasonableness should be the  
15 emphasis.

16 Evergy had sunk costs and processes in place to lower rates and reduce emissions for  
17 customers. It elected not to. That is imprudent.

18 It might be cost-effective for me to buy an EnergyStar HVAC but if I keep it in its box and  
19 continue to run my inefficient HVAC I would be irrational and incurring self-financial harm.  
20 The fact that the HVAC was cost effective at the store is irrelevant if I don't use it as intended  
21 or as it is capable of being used.

22 **V. TARIFF LANGUAGE**

23 **Q. What is the Company's argument as it pertains to tariff language?**

24 A. The Company argues that the programs performed as designed in the tariff language.

1 **Q. Do you agree?**

2 A. I disagree. The tariff language (which evolved through this prudency period) does not excuse  
3 bad managerial practices related to inaction. The Company caused financial harm to ratepayers  
4 by neglecting or forgetting it had demand response programs in place that would immediately  
5 result in financial savings to ratepayers.

6 **IV. SPP CAPACITY SALES AND FEE PROXY**

7 **Q. What is the Company's argument as it pertains to Staff's position on SPP capacity and**  
8 **sales and SPP fees?**

9 A. That it is not appropriate, is unreasonable and could even result in harm to customers.

10 **Q. Do you agree?**

11 A. No. Again, I believe Evergy's argument is inconsistent with the rationale given by the  
12 Commission and utilized in Evergy's surrebuttal report in EO-2019-0132. Putting that aside, I  
13 interpret Staff's argument of the hypothetical capacity sales and foregone SPP fees as an  
14 appropriate proxy for the damages caused to ratepayers. Evergy left money on the table. Staff's  
15 methodology is both reasonable and appropriate given the information available at the time  
16 and the fact that Evergy's management decided not to call events despite the savings that could  
17 be obtained.

18 **Q. Does this conclude your testimony?**

19 A. Yes.