Exhibit No.:

Issue: Staff's Prudence Review of

Evergy's Fuel Adjustment Clause

Witness: Jordan T. Hull Sponsoring Party: MoPSC Staff

Type of Exhibit: Rebuttal Testimony

Case No.: EO-2020-0262 (Consolidated

with EO-2020-0263)

Date Testimony Prepared: December 4, 2020

MISSOURI PUBLIC SERVICE COMMISSION INDUSTRY ANALYSIS DIVISION ENERGY RESOURCES DEPARTMENT

REBUTTAL TESTIMONY

OF

JORDAN T. HULL

EVERGY METRO, INC. and EVERGY MISSOURI WEST, INC., d/b/a EVERGY MISSOURI METRO and EVERGY MISSOURI WEST

CASE NO. EO-2020-0262 (Consolidated with Case No. EO-2020-0263)

> Jefferson City, Missouri December 2020

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3		JORDAN T. HULL
4 5		EVERGY MISSOURI METRO and
6		EVERGY MISSOURI WEST
7	CA	SE NO. EO-2020-0262 (Consolidated with Case No. EO-2020-0263)
8	Q.	Please state your name and business address.
9	A.	Jordan T. Hull, 200 Madison Street, Jefferson City, MO 65101.
10	Q.	By whom are you employed and in what capacity?
11	A.	I am employed by the Missouri Public Service Commission ("Commission" or
12	"PSC") as an	Associate Engineer.
13	Q.	Please describe your educational background and work experience.
14	A.	Please refer to Schedule JTH-r1 attached hereto.
15	Q.	Have you previously filed testimony before this Commission?
16	A.	No, I have not. Please refer to Schedule JTH-r2 for a list of cases in which I have
17	previously le	d or participated, but no testimony by me was required in those cases.
18	Q.	Have you participated in the Commission Staff's audit of Evergy Metro, Inc.,
19	d/b/a Evergy	Missouri Metro ("Evergy Missouri Metro") and Evergy Missouri West, Inc., d/b/a
20	Evergy Misso	ouri West ("Evergy Missouri West") (collectively, "Evergy" or "the Companies")
21	concerning th	ne Staff's Fuel Adjustment Clause ("FAC") prudence reviews in this proceeding?
22	A.	Yes, I have, with the assistance of other members of the Staff.
23	Executive Su	<u>ımmary</u>
24	Q.	Please summarize your rebuttal testimony in this proceeding.

1	A.	The purpose of my rebuttal testimony is to respond to Sierra Club witness
2	Mr. Tyler Co	mings' direct testimony regarding Evergy's "self-commitment" practices.
3	Q.	What does Mr. Comings recommend in his direct testimony?
4	A.	Mr. Comings recommends the following:
5		1. Evergy should commit its units on a "market basis" as often as possible.
6		2. If Evergy continues to self-commit units, it must justify those actions with
7		an economic analysis that shows it is cost-effective and not discard that
8		analysis. Moving forward, the Commission should make clear to Evergy that
9		it will disallow costs associated with unit self-commitment without
10		documented economic analysis.
11		3. The Commission should disallow ** ** in variable costs or, at a
12		minimum, ** ** at the Jefferey units due to Evergy
13		understating the units' variable costs.
14		4. On average, Evergy's bids into the SPP Market should be similar to its
15		reported fuel and variable O & M costs.
16		5. Evergy should differentiate between variable and fixed O & M costs so it
17		can report them more accurately going forward.
18	Q.	Does Staff agree with Mr. Comings' recommendations?
19	A.	No, Staff does not support any of Mr. Comings' recommendations.
20	Response to	Mr. Comings' Recommendations
21	Q.	What is the difference between "Market" and "Self" commitment statuses?
22	A.	The following definitions are directly from an SPP white paper on
23	Self-committi	ng in the SPP marketplace.
24		1. "Market" - the resource is available for centralized unit commitment
25		through its price sensitive (merit-based) price quantity offers.

- 2. "Self" the market participant is committing the resource through price insensitive offers outside of centralized unit commitment.
- Q. How does Evergy decide to "self-commit" a generating unit?
- A. This decision is made at the Company level based on their best judgement of how to run a unit, and with the help of Evergy's load forcasting modeling software. Each one of Evergy's generation facilities has its own distinct operating characteristics and requires specific operational guidelines to be followed as to maintain the reliability of the units as determined by Evergy's plant operations team to determine optimal plant reliability and manufacturer operational guidelines. With the help of this software, and analyzing the operating characteristics, Evergy can develop a day-ahead or multiple day-ahead strategy based on projections and historic trends of its own units.
 - Q. Should Evergy commit its units on a "market" basis only?
- A. No, if a unit is not "market" committed by SPP then Evergy is allowed to decide if it wants to "self-commit" the generating unit. There is no regulation against Evergy being able to decide when it chooses to "self-commit" a unit. There are multiple variables as to why Evergy would "self-commit" its units as outlined on page 14 of *Staff's Ninth Prudence Review Report* ("Evergy Missouri West Staff Report") for Evergy Missouri West and on pages 14 15 of *Staff's Third Prudence Review Report* ("Evergy Missouri Metro Staff Report") for Evergy Missouri Metro. As stated in both Staff Reports, some of the variables are unavoidable and can require the resource to be offered in self-commitent status. "Some of the reasons, such as high start-up costs, fuel contracts, or commitment bridging are economic in nature and can be handled within the market offer through dollar-based offer parameters. Thermal damage due to

start-ups and shutdowns and resulting major maintenance could be included in mitigated offers starting in April 2019."¹

Q. Has Staff reviewed the topic of "self-commit" in a working docket and if so, what were the findings?

A. As Staff explained in both its Staff Reports, Staff explored this issue in Case No. EW-2019-0370. Some of the findings in that case were that:

... the utility responses indicate that the economic minimum for each unit is based upon the physical limitations of each plant at a given point in time. These physical limitations are highly variable among plants, are affected by a variety of factors, and can vary by hour. Many of the units in question were commissioned as base load units well before the day-ahead markets were formed. These base load coal units were not designed to be cycled frequently and doing so would likely increase the likelihood of outages, increase operations and maintenance expense, and reduce the reliability of the units. Staff maintains that in order to fully understand the economic impact of self-scheduling on a given unit's profitability, an analysis at the RTO level would need to be conducted. Due to the highly confidential nature of utilities' market bidding strategies, it is highly unlikely that any party other than SPP or MISO have the raw data, modeling software access, and resources to conduct such an extensive analysis of market trends.² [Emphasis added.]

Staff does not have the data to perform a detailed analysis as to what would have been the additional costs to the units due to high cost of restart, increases in O&M cost and increased plant outages if Evergy would have designated these units as "market" instead of "self-commit".

[Evergy Missouri Metro] may also choose to self-commit a resource for market economic reasons. Those decisions are made looking at wind and load forecasts to see if we can expect the resource to be economical 'x' days into the future. The SPP Market model does not currently do a good

Evergy Missouri also stated:

 $^{^{1}}$ SPP, Self-comitting in SPP markets; Overview, impacts, and recommendations, December 2019, Page 8.

² EW-2019-0370, Staff's Second Supplemental Report, Pages 1 and 2.

1 job committing large, baseload units with long lead times, large startup 2 costs and long minimum run times. For example, SPP's Day-Ahead 3 Market will not commit a unit with a startup time greater than 24 hours. 4 Because of these restrictions, the Company has historically seen a high 5 percentage of "self" commitments at its baseload resources. Also, since 6 SPP's tool only looks at the next day, there are times we might 7 "self-commit" a unit that is already online knowing that over the next 8 five total days we would be economic even though operations for the 9 initial two days are at a financial loss; this results in lower overall costs to serve retail customers.³ 10 11 Q. Is Evergy transitioning away from "self-commitment"? 12 A. As Mr. Comings states in his direct testimony, Evergy has recently begun 13 moving away from "self-commitment" of its coal units and is moving more toward "market" 14 commitment of its coal units. In Staff's opinion, Evergy is taking appropriate steps to address 15 potential concerns of certain stakeholders by transitioning away from self-commitment. In Case 16 No. EW-2019-0370, Evergy offered the following on its "self-commitment" trends in the market: ** " 17 18 19 20 recommends "self-commitment" should continue to be tracked in the future to analyze if this 21 trend of moving away from "self-commitment" continues. Mr. Comings claims that Staff "ignored" the Jeffrey Units in its 22 Q. "self-commitment" analysis. Is this true? 23 Not at all. Staff requested from Evergy the data for all the "self-committed" units 24 A. 25 during the review period in Data Request (DR) 0055 (Case No. EO-2019-0262 DR 0055). In its ³ EW-2019-0370, Kansas City Power and Light, Response to Commission Questions, Page 3.

⁴ EW-2019-0370, Kansas City Power and Light, Response to Commission Questions, Page 5.

Evergy Missouri West Staff Report, Staff did not include any Jeffrey data as it did not receive any information regarding Jeffrey being "self-committed" in the original DR 0055. Upon further investigation and sending additional data requests to Evergy (DR 0055.1) it was found that the Jeffrey data was "inadvertantly" left out of the original DR (0055) that Staff requested. Since receiving this updated information, Staff has run analysis on the data, and presents it later in this rebuttal testimony. The analysis results did not change Staff's position on "self-commit".

- Q. To support his recommended disallowance, Mr. Comings states that Evergy "continually understates its units variable cost when submitting its bids to the SPP market," and that "[Staff] apparently took the hourly variable costs provided by Evergy at face value." How does Staff respond to these statements?
- A. Staff has never seen any reason to not take the hourly variable costs provided by Evergy at face value. Further, Staff does not presume that it knows better than Evergy when Evergy's generating units should or should not be in "self-commit" status. Staff would refer again to the fairly extensive list of reasons previously mentioned that Evergy may choose to self-commit its units, reasons only Evergy would know at the time. Therefore, Staff does not support Mr.Comings' recommended disallowances.
- Q. Should Evergy be required to retain documentation of its reasons for "self-committing" a generation unit and differentiate between variable and fixed O & M cost?
- A. While there are instances where it could be helpful in the analysis process to know the exact reason for the self commitment status and have the fixed and variable O & M differentiated, Staff does not support Mr. Comings recommendation this documentation be required. This documentation is not required by the SPP market monitor. In Staff's opinion, it is not nessesary for the Commission to require more than what is required by SPP.

1	Q.	Are	Evergy	ratepayers	overall	benefiting	from	Evergy	choosing	to
2	"self-commit" units?									

A. Yes, Below is a graph showing Evergy Missouri West's updated "self-commitment" transactions for the review period.

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Staff reviewed the hourly transactions that were deemed "self-commitment" status by taking the hourly real time energy cost and adding it to the hourly total revenue for that same hour for the individual generating unit that was "self-committed," then compared the number of positive "In the Money" hourly transactions to the negative "Out the Money" hourly transactions.

From this analysis, Staff concludes that of the ** ** "self-commitment" hourly					
transactions in the Evergy Missouri West territory, ** ** of those transations were					
profitable or "in the money". This comes out to ** ** of the time that Evergy Missouri					
West chose to "self-commit" units during the review period it was profitable. For the review					
period, Evergy Missouri West had ** ** in net settlement (revenue exceeding					
the cost). The same trend is seen in Evergy Missouri Metro where ** ** of its hourly					
"self-commitment" transactions are "in the money" with ** ** in net settlement					
(revenue exceeding the cost) for the review period.					
Q. What are your conclusions based on this analysis?					
A. Staff analyzes "self-commitment" as a concept in whole rather than each					
individual hour/transaction for a particular unit. When looking at a certain hour you may see a					
loss or a gain but when you look at all the transactions as a whole throughout the review period					
you are able to see that self-commitment for Evergy has not caused harm to ratepayers. Staff's					
conclusion reiterates the conclusion from Case No. EW-2019-0370 that stated the following:					
**					
**					
In order to determine the level of benefit or detriment to ratepayers,					
Staff would need to run a simulation of a historical period, changing the must-run status for day ahead and real time markets while making					
sure all ancillary services are met. That kind of analysis would require					
Staff to obtain HC information on all generation assets in SPP and					
MISO and require Staff to be able to run a scenario to dispatch all plants					

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with a market commit status. Staff does not have the tools to complete such a task.⁵

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As stated in the Evergy West Staff Report and the Evergy Metro Staff Report, in evaluating prudence, Staff reviews whether a reasonable person making the same decision would find both the information the decision-maker relied on and the process the decision-maker employed to be reasonable based on the circumstances at the time the decision was made, *i.e.*, without the benefit of hindsight. If, in Staff's opinion, either the information relied upon or the decision-making process employed was impudent, then Staff examines whether the imprudent decision caused any harm to ratepayers. Only if an imprudent decision resulted in harm to ratepayers, without the benefit of hindsight, will Staff recommend a disallowance.

In this case, it is Staff's opinion the information Evergy relied on and Evergy's decision-making process were reasonable. Furthermore, Staff's opinion is that no ratepayer harm resulted from Evergy's "self-commitment" of its units.

- Q. Does this conclude your prepared rebuttal testimony in this proceeding?
- A. Yes, it does.

⁵ EW-2019-0370, Staff's Second Supplemental Report, Pages 12.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of Evergy Missouri West, Inc. d/b/a Evergy Missouri West)	
AFFIDAVIT OF JORDAN T. HULL	
STATE OF MISSOURI)	
COUNTY OF COLE) ss.	
COME NOW JORDAN T. HULL and on his oath declares that he is o	of sound mind
and lawful age; that he contributed to the foregoing Rebuttal Testimony of Jorda	ın T. Hull; and
that the same is true and correct according to his best knowledge and belief, un	der penalty of
perjury.	
Further the Affiants sayeth not.	
/s/ Jordan T. Hull JORDAN T. HULL	

Jordan T. Hull

Education and Employment Background

Current Position:

I am the Associate Engineer of the Energy Resources Department, Industry Analysis Division of the Missouri Public Service Commission.

Education/Experience:

I received a Bachelor of Science degree in Biological Engineering (Environmental Emphasis) in May 2016 from the University of Missouri- Columbia. Prior to my current position, I was employed at the Missouri Department of Natural Resources as an Environmental Engineer for the Air Pollution Control Program from June 2016 through November 2018.

Jordan T. Hull

Summary of Case Involvement:

Case Number	Utility	Type	Issues
EO-2019-0067	KCP&L GMO	FAC Prudency Review	Heat Rates, Plant Outages, Generation Utilization
EO-2019-0068	KCP&L	FAC Prudency Review	Heat Rates, Plant Outages, Generation Utilization
EO-2019-0049	Liberty-Empire Electric Company	Integrated Resource Plan	Misc.
EO-2019-0132 & EO-2019-0133	KCP&L	MEEIA	Misc.
EO-2019-0257	Ameren- Missouri	FAC Prudency Review	Heat Rates, Plant Outages, Generation Utilization
ER-2019-0335	Ameren- Missouri	Rate Case	Heat Rates
ER-2019-0374	Liberty-Empire Electric Company	Rate Case	Heat Rates
EO-2020-0059	Liberty-Empire Electric Company	FAC Prudency Review	Heat Rates, Plant Outages, Generation Utilization
EO-2020-0262	EvergyWest	FAC Prudency Review	Heat Rates, Plant Outages, Generation Utilization, Self- Commitment.
EO-2020-0263	Evergy Metro	FAC Prudency Review	Heat Rates, Plant Outages, Generation Utilization, Self- Commitment
EO-2021-0060	Ameren- Missouri	FAC Prudency Review	Heat Rates, Plant Outages, Generation Utilization, Self- Commitment