MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

THIRD PRUDENCE REVIEW OF COSTS

RELATED TO THE FUEL ADJUSTMENT CLAUSE

FOR THE ELECTRIC OPERATIONS

OF

EVERGY METRO, INC.,

d/b/a Evergy Missouri Metro ("Evergy Missouri Metro"),

f/k/a Kansas City Power & Light Company ("KCPL")

CASE NO. EO-2020-0263

July 1, 2018 through December 31, 2019

Jefferson City, Missouri August 28, 2020

** Denotes Confidential Information **

1		TABLE OF CONTENTS OF
2		STAFF REPORT
3 4 5 6 7		THIRD PRUDENCE REVIEW OF COSTS RELATED TO THE FUEL ADJUSTMENT CLAUSE FOR THE ELECTRIC OPERATIONS OF EVERGY METRO, INC.
8		July 1, 2018 through December 31, 2019
9		CASE NO. EO-2020-0263
10	I.	EXECUTIVE SUMMARY1
11	II.	INTRODUCTION
12	A.	GENERAL DESCRIPTION OF EVERGY MISSOURI METRO'S FAC2
13	B.	PRUDENCE STANDARD4
14 15	III.	FUEL COSTS, PURCHASED POWER COSTS, TRANSMISSION COSTS, NET EMISSION COSTS
16	A.	UTILIZATION OF GENERATION CAPACITY7
17	B.	HEAT RATES
18	C.	PLANT OUTAGES11
19	D.	SELF-COMMITMENT OF BASELOAD GENERATION FACILITIES INTO SPP13
20	E.	NATURAL GAS COSTS
21	F.	COAL AND RAIL TRANSPORTATION COSTS
22	G.	FUEL OIL COSTS
23	H.	TRANSMISSION COSTS
24	I.	NUCLEAR FUEL
25	J.	EMISSION ALLOWANCES
26	K.	OFF-SYSTEM SALES REVENUE
27	L.	RENEWABLE ENERGY CREDIT REVENUES
28	M.	MONTROSE GENERATING UNIT

1	N.	CIMARRON 2 WIND FARM PURCHASED POWER AGREEMENT	35
2	О.	SLATE CREEK WIND PROJECT PURCHASED POWER AGREEMENT	36
3	P.	OSBORN WIND ENERGY PURCHASED POWER AGREEMENT	37
4	Q.	SPEARVILLE 3 WIND ENERGY FACILITY PURCHASED POWER AGREEMENT3	39
5	R.	WAVERLY WIND FARM PURCHASED POWER AGREEMENT	10
6	S.	ROCK CREEK WIND PROJECT PURCHASED POWER AGREEMENT4	41
7	Τ.	PRAIRIE QUEEN WIND PURCHASED POWER AGREEMENT	12
8	U.	PRATT WIND PURCHASED POWER AGREEMENT	43
9	V.	PURCHASED POWER COSTS	14
10	IV.	INTEREST	18

7

8

9

10

11

12

1

THIRD PRUDENCE REVIEW OF COSTS RELATED TO THE FUEL ADJUSTMENT CLAUSE FOR THE ELECTRIC OPERATIONS OF EVERGY METRO, INC.

July 1, 2018 through December 31, 2019

CASE NO. EO-2020-0263

I. EXECUTIVE SUMMARY

The Missouri Public Service Commission ("Commission") first authorized a Fuel Adjustment Clause ("FAC") for Evergy Metro, Inc., d/b/a Evergy Missouri Metro ("Evergy Missouri Metro" or "Company"), f/k/a Kansas City Power & Light Company ("KCPL") in Case No. ER-2014-0370. Since then, the Commission has approved continuation of Evergy Missouri Metro's FAC with modifications in its *Report and Order* in the Company's most recent general rate cases: Case Nos. ER-2016-0285 and ER-2018-0145.

Commission Rule 20 CSR 4240-20.090(11)¹ and Missouri Revised Statute Section 386.266.5(4) require that the Commission's Staff ("Staff") conduct prudence reviews of an electric utility's FAC no less frequently than every 18 months. In this prudence review, Staff analyzed items affecting Evergy Missouri Metro's fuel costs; purchased power costs; net emission allowance costs; transmission costs; off-system sales revenues; and renewable energy credit (REC) revenues for the seventh, eighth and ninth accumulation periods of Evergy Missouri Metro's FAC ("prudence review period"). The seventh accumulation period started July 1, 2018 and ended December 31, 2018. The eighth accumulation period started January 1, 2019 and ended June 30, 2019. The ninth accumulation period started July 1, 2019 and ended December 31, 2019. Thus, the 18-month prudence review period is from July 1, 2018 through December 31, 2019 ("Review Period"). This is Staff's third Prudence Review Report for Evergy Missouri Metro's FAC. Table 1 identifies Staff's previous Evergy Missouri Metro FAC prudence reviews.

27

 <sup>13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26</sup>

¹ Effective January 30, 2019.

Review	File Number	Review Period
First	EO-2017-0231	July 1, 2015 through December 31, 2016
Second	EO-2019-0068	January 1, 2017 through June 30, 2018

 Table 1: Completed Evergy Missouri Metro FAC Prudence Reviews

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. The decision actually made is disregarded; instead, the review evaluates the reasonableness of the information the decision-maker relied on and the decision-making process the decision-maker employed. If either the information relied upon or the decision-making process employed was imprudent, then Staff examines whether the imprudent decision caused any harm to ratepayers. Only if an imprudent decision resulted in harm to ratepayers, will Staff recommend a refund.

Staff analyzed a variety of items in examining whether Evergy Missouri Metro was imprudent when it incurred the fuel and purchased power costs associated with its FAC. Based on its review, Staff found no evidence of imprudence by Evergy Missouri Metro during the Review Period.²

16 Staff Expert/Witness: Brooke Mastrogiannis

II. INTRODUCTION

A. General Description of Evergy Missouri Metro's FAC

Table 2 identifies Evergy Missouri Metro's Commission-approved FAC tariff sheets which were applicable for service provided by Evergy Missouri Metro to its customers during the period July 1, 2018 through December 31, 2019:

² Staff would like to note that, in Case No. EO-2020-0227, Staff recommended several disallowances to Evergy Missouri Metro's Demand Response programs. Evergy Missouri Metro filed a *Motion to Limit Scope of Proceeding* in that case on July 29, 2020, arguing that those disallowances recommended by Staff were best addressed in this docket. The Commission rejected Evergy Missouri Metro's motion on August 19, 2020.

Evergy Missouri Metro's Commission-approved FAC Tariff Sheets			
July 1, 2018 through December 31, 2019			
July 1, 2018 through December 5, 2018	December 6, 2018 through December 31, 2019		
Second Revised Sheet No. 50.11	Original Sheet No. 50.21		
Second Revised Sheet No. 50.12	Original Sheet No. 50.22		
Second Revised Sheet No. 50.13	Original Sheet No. 50.23		
Second Revised Sheet No. 50.14	Original Sheet No. 50.24		
Second Revised Sheet No. 50.15	Original Sheet No. 50.25		
Second Revised Sheet No. 50.16	Original Sheet No. 50.26		
Second Revised Sheet No. 50.17	Original Sheet No. 50.27		
Second Revised Sheet No. 50.18	Original Sheet No. 50.28		
Second Revised Sheet No. 50.19	Original Sheet No. 50.29		
	Original Sheet No. 50.30		

4

6

7

8 9 For each accumulation period ("AP"),³ Evergy Missouri Metro's Commission-approved FAC allows Evergy Missouri Metro to recover from (if the actual net energy costs exceed) or refund to (if the actual net energy costs are less than) its ratepayers ninety-five percent (95%) of its Missouri jurisdictional⁴ actual net energy costs ("ANEC")⁵ less net base energy cost ("B")⁶ which is identified as (ANEC – B)*J in Evergy Missouri Metro's FAC.⁷ Evergy Missouri Metro accumulates variable fuel costs, purchased power costs, transmission costs and

Page 3

Schedule BJF-d5 Page 6 of 53

approved EAC Tariff Sheets

³ Accumulation periods are June through November and December through May.

⁴ Missouri jurisdictional factor J is defined on Evergy Missouri Metro's Original Sheet No. 50.28 as Missouri Retail Energy Ratio = (MO Retail kWh sales + MO Losses) / (MO Retail kWh Sales + MO Losses + KS Retail kWh Sales + KS Losses + Sales for Resale, Municipals kWh Sales [including border customers] + Sales for Resale, Municipals Losses), where MO Losses = 6.32%; KS Losses = 7.52%; Sales for Resale, Municipals Losses = 6.84%.

⁵ "Actual Net Energy Costs" are equal to fuel costs (FC) plus net emission costs (E) plus purchased power costs (PP) plus transmission costs (TC) minus off-system sales revenue (OSSR) and renewable energy credit revenue (R) as defined on Evergy Missouri Metro's Original Sheet No. 50.22.

⁶ Net base energy costs (B) is defined on Evergy Missouri Metro's Original Sheet No. 50.28 as net base energy costs ordered by the Commission in the last general rate case consistent with the costs and revenues included in the calculation of the Fuel and Purchased Power Adjustment ("FPA"). Net base energy costs will be calculated as shown below S_{AP} x Base Factor ("BF").

⁷ For the seventh, eighth and ninth accumulation periods, the (ANEC - B)*J amounts are included on line 5 of Evergy Missouri Metro's 1st Revised Sheet No. 50.31, 2nd Revised Sheet No. 50.31, and 3rd Revised Sheet No. 50.31, respectively.

1 net emissions costs minus off-system sales revenues and renewable energy credit revenues 2 during six-month accumulation periods. Each six-month accumulation period is followed by a 3 twelve-month recovery period ("RP")⁸ when 95% of the (ANEC – B)*J amount (including the monthly application of interest)⁹ is recovered from or returned to ratepayers through an increase 4 5 or decrease in the FAC Fuel Adjustment Rates ("FAR") during the twelve-month RP. Because 6 the FAR rarely, if ever, will exactly match the required offset, Evergy Missouri Metro's FAC 7 is designed to true-up the difference between the revenues billed and the revenues authorized 8 (including the monthly application of interest) for collection during recovery periods. Any 9 disallowance the Commission orders as a result of a prudence review shall include interest at the Company's short-term interest rate and will be accounted for as an item of cost¹⁰ in a future 10 filing to adjust the FAR.

11 12

13

14

15

16

17

18

19 20

21

22

23

24 25

26

27

28

B. Prudence Standard

In *State ex rel. Associated Natural Gas Co. v. Public Service Com'n of State of Mo.*, the Western District Court of Appeals stated the Commission defined its prudence standard as follows:

[A] utility's costs are presumed to be prudently incurred... However, the presumption does not survive "a showing of inefficiency or improvidence... [W]here some other participant in the proceeding creates a serious doubt as to the prudence of expenditure, then the applicant has the burden of dispelling these doubts and proving the questioned expenditure to have been prudent.

In the same case, the PSC noted that this test of prudence should not be based upon hindsight, but upon a reasonableness standard: [T]he company's conduct should be judged by asking whether the conduct was reasonable at the time, under all the circumstances, considering that the company had to solve its problem prospectively rather than in reliance on hindsight. In effect, our responsibility is to determine how reasonable people would have performed the tasks that confronted the company.¹¹

⁸ Recovery periods are: October through September and April through March.

⁹ See SECTION IV. INTEREST, of this Prudence Review Report.

¹⁰ See PRUDENCE REVIEWS on Evergy Missouri Metro's Original Sheet No. 50.30.

¹¹ 954 S.W.2d 520, 528-29 (Mo. App. W.D., 1997) (citations omitted).

In reversing the Commission in that case, the Court did not criticize the Commission's
 definition of prudence, but held, in part, that to disallow a utility's recovery of costs from its
 customers based on imprudence the Commission must determine the detrimental impact of that
 imprudence on the utility's ratepayers.¹² This is the prudence standard Staff has followed in
 this review. Staff reviewed for imprudence the areas identified and discussed below for Evergy
 Missouri Metro's seventh, eighth, and ninth six-month accumulation periods.

7 Staff Expert/Witness: Brooke Mastrogiannis

III.

FUEL COSTS, PURCHASED POWER COSTS, TRANSMISSION COSTS, NET EMISSION COSTS

Evergy Missouri Metro's FAC includes four major components of costs: fuel costs, purchased power costs, net emission costs and transmission costs. It also includes two components of revenues: off-system sales revenues and renewable energy credit revenues. Table 3 is a breakdown of Evergy Missouri Metro's fuel costs, purchased power costs, net emission costs, transmission costs, off-system sales revenues, and renewable energy credit revenues for the period of July 1, 2018, through December 31, 2019:

Continued on next page

¹² *Id.* at 529-30.

**			
			<u> </u>
	 		<u> </u>
· ·			
		·	
L	 		

5 Staff Experts/Witnesses: Brooke Mastrogiannis, Lisa Wildhaber, Cynthia M. Tandy

3

4

5

6

7

8

9

1

A. Utilization of Generation Capacity

1. Description

The purpose of this section is to provide an overview of Evergy Missouri Metro's available supply-side and demand response resources and review the process by which generating units are selected to satisfy native load requirements during the Review Period. Evergy Missouri Metro's generating units consist of a mixture of coal, nuclear, natural gas, diesel, and wind as indicated in Table 4¹³ below titled Supply Side Resources. Table 5 provides a list of Evergy Missouri Metro's long-term Power Purchase Agreements ("PPA"). Table 6 contains a capacity summary for Evergy Missouri Metro's current fleet.

10 11

**

Table 4 - Confidential

¹³ Evergy Missouri Metro response to Data Request No. 0013.

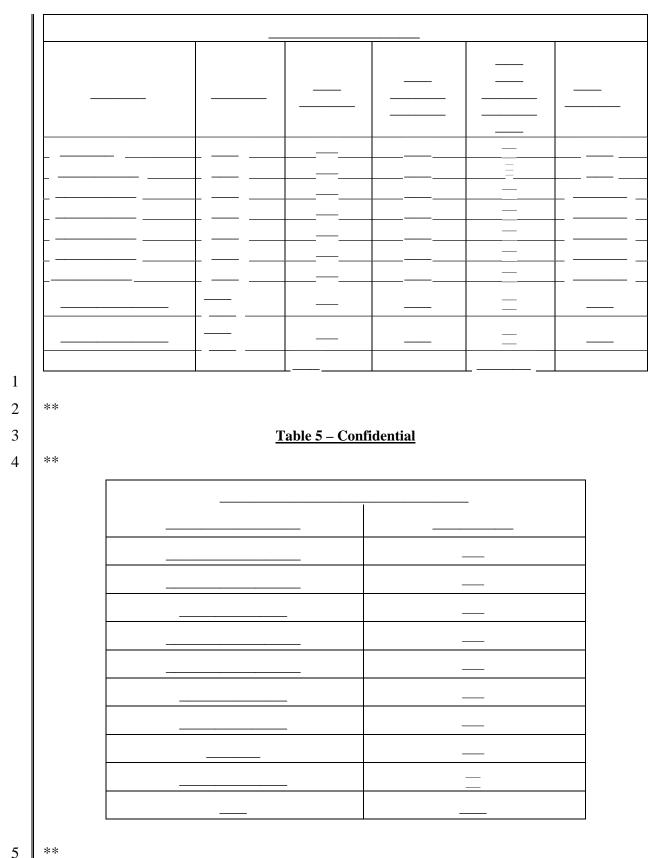


Table 6 – Confidential



**

1

**

3

4

2. Summary of Cost Implications

5 In SPP's Integrated Marketplace ("SPP IM"), the vast majority of generation dispatch 6 decisions are made by SPP via established market requirements and processes. SPP market 7 rules currently must offer requirements both for the Day Ahead Market ("DA") and the 8 Real Time Balancing Market ("RT"). With respect to the DA, there is a Day Ahead Must Offer 9 requirement which essentially states that Market Participants ("MP") must offer enough 10 generation to cover that MP's next day projected peak load, ancillary service obligations and 11 any firm sales the MP has made. In addition, the SPP Market Monitoring Unit monitors for 12 Physical Withholding of generation, which further incentivizes MPs to offer much of their 13 available generation in the DA, even if they have already met their Must Offer requirement. 14 With respect to the RT, SPP requires that all physically available generation be offered to the 15 market. In accordance with SPP rules and requirements, Evergy Missouri Metro submits 16 generation offers in the DA and RT. Once these offers have been submitted, the SPP market 17 co-optimization processes take over from there. SPP market applications consider inputs such 18 as system-wide requirements, generator operating parameters, offers from all MPs, and 19 transmission system topology to arrive at the most cost effective and reliable generation 20 solution possible. Some of these applications include the Security Constrained Unit

1 Commitment ("SCUC") and Security Constrained Economic Dispatch ("SCED") tools. 2 Once the least cost viable solution is arrived at, SPP issues operating instructions to MPs. Under 3 the SPP market construct, MPs are given the flexibility to let the SPP market decide entirely on 4 its own when to commit a given unit or to self-commit the generator. A common example of 5 the latter is if a unit needs to be online for required testing on a given day. Even if a generator 6 is self-committed, this simply establishes that the unit will be online. SPP will still dispatch the 7 unit via the SCED tool within its dispatchable range as established through the market 8 submissions process.

9 10

11

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

3. Conclusion

Staff did not observe any evidence of imprudent utilization of generation resources during the time period examined in this prudence review.

12

4. Documents Reviewed

Evergy Missouri Metro's responses to Staff Data Request Nos. 0002, 0003, 0010, 0011, 0012, 0013, 0015, 0017, 0018, 0021, 0022, 0041, 0043, and 0053.

Staff Expert/Witness: Jordan Hull

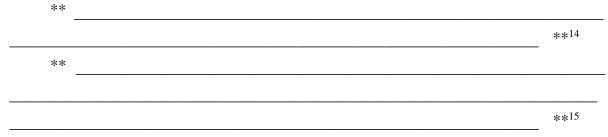
B. Heat Rates

1. Description

Heat rates of generating units are an indicator of each unit's performance. A heat rate is a calculation of total volume of fuel burned for electric generation multiplied by the average heat content of that volume of fuel for a given time period divided by the total net generation of electricity in kilowatt hours (kWh) for that same time period.

2. Summary of Cost Implications

Heat rates are inversely related to the operating efficiency of the generating unit. Increasing heat rates of specific units over time may indicate that a specific unit's efficiency is declining. Heat rates can vary greatly depending on operating conditions including but not limited to load, hours of operation, shutdowns and startups, unit outages, derates, and weather conditions. Therefore, a good indication of unit performance for frequently used units is an analysis of the trend of heat rates over time. A permanent increase in monthly heat rates is commonly the result of a decrease in a generating unit's operating efficiency. This typically occurs when additional emissions reduction equipment is added to the exhaust of the generating unit. Continued utilization of units with sustained elevated heat rates could result in Evergy Missouri Metro incurring higher fuel costs per unit of electricity generated than it would
 otherwise have incurred. If Evergy Missouri Metro was imprudent in response to the ongoing
 trend of a unit's heat rate, ratepayer harm could result from an increase in the fuel costs that are
 collected through Evergy Missouri Metro's FAC charges.



3. Conclusion

In reviewing the monthly heat rates of Evergy Missouri Metro's generating units and examining the reasons behind the unfavorable trends and sporadic heat rate months, Staff found no indication that Evergy Missouri Metro acted imprudently during the Review Period.

5

6 7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

4. Documents Reviewed

a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0018, and 0065; and

b. Monthly Outage data in the Monthly Reports submitted by Evergy Missouri Metro in compliance with Rule 20 CSR 4240-3.190.

Staff Expert/Witness: Jordan Hull

C. Plant Outages

1. Description

Generating stations' outages generally can be classified as scheduled outages, forced outages, or partial outages. Scheduled outages consist of either a planned outage or a maintenance outage. A planned outage is one that is scheduled well in advance, with a predetermined duration and occurring only once or twice a year. Outages are planned and scheduled over one year in advance. The exact start date depends on freezing temperatures and natural gas availability. Turbine and boiler overhauls, inspections, testing, and nuclear refueling are typical planned outages. A maintenance outage is one that can be deferred beyond the end of the next weekend but must be taken before the next planned outage. A forced outage is an

¹⁴ Response to Data Request No. 0065.

¹⁵ Capacity factor is defined as the ratio between what a generation unit is capable of generating at maximum output versus the unit's actual generation output over a period of time.

outage that cannot be deferred beyond the next weekend, and a partial outage, or derating, is a
 condition that requires the unit to be limited to an energy output below maximum capacity.

Outages taken at any of the generating units have an impact on how much Evergy Missouri Metro will pay for fuel and purchased power. Any planned outage during peak load demand times or a period of high replacement energy prices has the potential result of Evergy Missouri Metro paying more for fuel and purchased power costs than it would have paid if the outage were planned during forecasted low load times. Periodic planned outages are required to maintain each generating unit in peak operating condition to minimize forced or maintenance outages that could occur during peak load demand or periods of high replacement energy prices, typically June through August and January through February.

Staff examined the planned outages and their timing for imprudence. An example of an imprudent outage would be scheduling a planned outage of a large base loaded unit during a time of peak load or a period of high replacement energy prices.

Evergy Missouri Metro has little or no control over the timing of unscheduled maintenance or forced outages of the generating stations it owns and operates when such outages are the result of unforeseen events. The Company has no control over the timing of planned outages for generating stations it does not operate. These types of outages are not included as a part of this prudence review.

2. Summary of Cost Implications

An imprudent planned outage could result in an increased cost of purchased power by Evergy Missouri Metro from the SPP IM as well as a decrease in off-system sales revenues through the SPP IM.

3. Conclusion

Staff did not find any evidence of imprudent planned outages by Evergy Missouri Metro during the Review Period.

4. Documents Reviewed

 Evergy Missouri Metro's responses to Staff Data Request Nos. 0004, 0005, 0005.1, 0006 and 0047.

Staff Expert/Witness: Jordan Hull

D. Self-Commitment of Baseload Generation Facilities into SPP

1. Description

During this FAC prudence review, Staff conducted a review of commitment status of Evergy Missouri Metro's generation facilities into SPP in an effort to determine any negative impacts that might be occurring because of such actions. Evergy Missouri Metro has large and varied electric generation facilities that are designed to provide varying types of services to its customers. These generation facilities include nuclear, coal, natural gas, PV solar, and wind turbines. Each one of Evergy Missouri Metro'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 Missouri Metro's plant operations team to determine optimal plant reliability and manufacturer operational guidelines.

**¹⁶ With these tools the Company can develop a

day-ahead load bidding strategy based on current projections and historical trends.

"The SPP Integrated Marketplace attempts to minimize the cost to serve load subject to transmission and generator constraints. The day-ahead market does this by using two main tools: centralized unit commitment and economic dispatch. Centralized unit commitment sorts the available generators from least expensive to most expensive and then selects the least expensive units that can achieve the objective without violating the constraints of the optimization. Economic dispatch then uses the results of the unit commitment process as inputs to its own separate optimization. The results of which produce two key, time-based outputs: the megawatts each generator should produce at the corresponding locational prices. Centralized unit commitment and economic dispatch processes are designed to work together to make the market more efficient."¹⁷ The SPP market allows participants to commit resources in different ways rather than have the market choose which units to run. SPP utilizes five resource offer commitment status designations¹⁸ for its market participants ("MP"):

¹⁶ Response to Staff Data Request No. 0055.

¹⁷ SPP, Self-committing in SPP markets: Overview, impacts, and recommendations, December 2019, Page 4.

¹⁸ *Id*, Page 5.

1	1. Market – the resource is available for centralized unit commitment through
2	its price sensitive (merit-based) price quantity offers.
3	2. Self – the market participant is committing the resource through price
4	insensitive offers outside of centralized unit commitment.
5	3. Reliability – the resource is off-line and is only available for centralized unit
6	commitment if there is an anticipated reliability issue.
7	4. Outage – the resource is unavailable due to a planned, forced, maintenance,
8	or other approved outage.
9	5. Not participating – the resource is otherwise available but has elected not to
10	participate in the day-ahead market.
11	**
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	**19
23	SPP Market participants have stated the following reasons for self-commitment: ²⁰
24	• Testing – NERC requirement
25	Public Utilities Regulatory Policy Act (PURPA)
26	• Federal service exemptions
27	• Started by a different market

 ¹⁹ Response to Staff Data Request No. 0055.
 ²⁰ SPP, Self-committing in SPP markets: Overview, impacts, and recommendations, December 2019, Pages 7 and 8.

• Weather 1 2 • Long lead times 3 • Fuel contracts 4 • Other contracts 5 • Long minimum run times • Commitment bridging 6 7 • Desire to reduce thermal damage to the unit due to starts and stops 8 • High startup costs 9 Some of these reasons are unavoidable and can require the resource to be offered in 10 self-commitment status. Testing the output of a plant, as periodically required by regulatory 11 agencies, is a frequent justification. "Some of the reasons, such as high start-up costs, fuel 12 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. SPP has seen a decline in self-committed generation over time and it is possible that perceptions of economic justifications have changed over time."²¹ Staff analyzed data received from Evergy Missouri Metro to determine the financial impacts of the self-commit units as offered and cleared into the SPP Day-Ahead and Real-time market. Table 7 provides the summary of Staff's review by generating unit for the Review Period of July 1, 2018 through December 31, 2019. Staff reviewed the hourly transactions that were deemed self-commitment 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 Staff compared the number of positive "In the Money" hourly transactions

²¹ *Id.* Page 8.

to the negative "Out the Money" hourly transactions. Results are show below in Table 7. Staff

then decided to take it a step further and show the amount of revenue that corresponded to the

"In vs Out" of money transactions as well as a net settlement (revenue) or total when adding

the "In money" to the "Out money" transactions to show an overall revenue associated with

1	self-c	commitment. Staff is	providing Table 7 as	actual financial re	sults of Evergy Missour	ri
2	Metro	o's current practice of	Self-Commit of its bas	eload generation u	nits as described below.	
3			<u>Table 7 – Con</u>	fidential		
4	**					
5	**					
6		Staff explored this	issue in Case No. EW-2	2019-0370. Some o	of the findings in that case	e
7	were	that:				
8		the utility	y responses indicate that	at the economic min	nimum for	
9			based upon the physica			
10 11			in time. These physical ts, are affected by a va			
12		by hour. M	any of the units in que	estion were commi	ssioned as	
13 14	base load units well before the day-ahead markets were formed. These base load coal units were not designed to be cycled					
15		frequently a	and doing so would lik	ely increase the lik	elihood of	
16 17			crease operations and eliability of the units			
1/		reduce the r	enabling of the units	. Starr maintains th		

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.²²

8 Staff does not have the data to perform a detailed analysis as to what would have been the 9 additional costs to the units due to high cost of restart, increases in O&M cost and increased 10 plant outages if Evergy Missouri Metro would have designated these units as "Market" instead 11 of "Self-Commit." This is the first review of the commitment statuses for Evergy Missouri 12 Metro in a FAC prudency review, but Staff plans to compare this review to future reviews to 13 see what trend self-commitment is following for Evergy Missouri Metro. SPP acknowledged in its Market Report for Winter of 2020 that self-commitment is on a "downward trend"²³ 14 15 market wide. Based on the information provided by Every Missouri Metro and Staff's 16 knowledge of general trends in market commitment behavior, Staff is not aware of any 17 prudency issues related to Evergy Missouri Metro's practice of self-commitment.

18

19

20

21

22

23

24

25

26

27

28

29

1 2

3

4

5

6

7

2. Summary of Cost Implications

Imprudent Unit Generation commitment could result in increased cost of purchased power by Evergy Missouri Metro from the SPP IM as well as a decrease in off-system sales revenues through the SPP IM.

3. Conclusion

Staff did not find any evidence of imprudent generation unit self-commitment by Evergy Missouri Metro during the Review Period.

4. Documents Reviewed

- a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0055;
- b. File No. EW-2019-0370, Supplemental Reports; and
- c. SPP Documents: Market Report for Winter 2020 and Self-committing in SPP markets: Overview.

30 Staff Expert/Witness: Jordan Hull

²² EW-2019-0370, Staff's Second Supplemental Report, Pages 1 and 2.

²³ SPP Market Report for Winter 2020, Generation Scheduling, Published May 18, 2020, Page 21.

E.

Natural Gas Costs

1. Description

For the Review Period, \$** _____ ** or ** = ** % of Evergy Missouri Metro's 3 4 total fuel costs, purchased power costs, transmission costs, and net emission costs was 5 associated with the natural gas used in generating electricity. The cost of natural gas includes various miscellaneous charges such as firm transportation service charges and other fuel 6 7 handling expenses. During the Review Period, Evergy Missouri Metro's natural gas price averaged \$** ____ ** per MMBtu, based on ** _____ ** MMBtu of actual natural gas 8 burned and costs of \$** _____ **. Staff reviewed the contract terms and a sampling of 9 10 invoices for gas purchased. Evergy Missouri Metro receives natural gas services from 23 gas supply companies and 5 natural gas transportation companies. The companies are identified in Table 8:

Table 8 - Confidential

F	
L	
F	
F	
F	
├	
<u> </u>	
F	
F	
L	

**

15

**

1	Table 9 lists the Gas Transportation Contracts in effect for the Review Period:
2	<u>Table 9 – Confidential</u>
3	**
4	**
4	
5	Table 10 identifies Evergy Missouri Metro's intermediate and peaking generating units that
6	burn natural gas:
7	<u>Table 10 – Confidential</u>
8	**
9	**
10	2. Summary of Cost Implications
11	If Evergy Missouri Metro was imprudent in its purchasing decisions relating to natural
12	gas, ratepayer harm could result from increased FAC charges.
13	3. Conclusion
14	Staff found no indication Evergy Missouri Metro's purchases of natural gas were
15	imprudent during the Review Period.

1	4. Documents Reviewed		
2	a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0023, 0024, 0035,		
3	0035.1, 0045, 0066; and		
4	b. Evergy Missouri Metro's monthly reports, FAR Filings and related work papers for		
5	AP 7, 8, and 9.		
6	Staff Expert/Witness: Lisa Wildhaber		
7	F. Coal and Rail Transportation Costs		
8	1. Description		
9	For the Review Period, \$** ** or ** ** % of Evergy Missouri Metro's		
10	total fuel costs, purchased power costs, transmission costs, and net emission allowance costs		
11	was associated with the coal used in generating electricity. The cost of coal includes various		
12	miscellaneous charges such as rail and other ground transportation service charges, and other		
13	fuel handling expenses. Staff reviewed the contract terms of six (6) short and long-term coal		
14	purchase contracts, as well as a sampling of invoices for coal purchased and delivered.		
15	The counterparties for the contracts are identified in Table 11:		
16	Table 11 - Confidential		
17	**		
18	**		
19	The contracts provide coal delivery to Evergy Missouri Metro's Hawthorn 5, Iatan 1 and 2,		
20	LaCygne 1 and 2, and Montrose 2 and 3. The price of coal can either be a fixed price for the		
21	entire contract, a fixed price for each year of the contract, a base price plus an escalation as		
22	calculated per the contract, a price determined by the Master Purchase & Sales Agreement, or		
23			
	a price which is index-based.		

1	2. Summary of Cost Implications
2	If Evergy Missouri Metro was imprudent in its decisions relating to purchasing and
3	transporting coal, ratepayer harm could result from an increase in FAC charges.
4	3. Conclusion
5	Staff found no indication that Evergy Missouri Metro's purchases and transportation of
6	coal or its coal-related contracts were imprudent during the Review Period.
7	4. Documents Reviewed
8	a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0021, 0023, 0031,
9	0035, 0035.1, 0045, 0066; and
10	b. Evergy Missouri Metro's monthly reports, FAR Filings and related work papers for
11	AP 7, 8, and 9.
12	Staff Expert/Witness: Lisa Wildhaber
13	G. Fuel Oil Costs
13 14	1. Description
15	For the Review Period, $** _ ** $ or $** \equiv ** %$ of Evergy Missouri Metro's
16	total fuel costs, purchased power costs, transmission costs, and net emission allowance costs
10	was associated with the fuel oil used in generating electricity. The cost of fuel oil includes
18	various miscellaneous charges, such as rail and/or ground transportation service charges and
19	other miscellaneous fuel handling expenses. Staff reviewed the contract terms of Evergy
20	Missouri Metro's two (2) oil contracts that were in place during the Review Period, as well as
20	a sampling of invoices for fuel oil purchased. The contracts provide a primary delivery location
22	and agreement on the price. The price is based on the market price at the time Evergy Missouri
23	Metro purchases the fuel oil. The counterparties for the fuel oil contracts are identified in
24	Table 12:
25	Table 12 - Confidential
26	**
27	**
28	The fuel oil contracts provide delivery of fuel oil to various generating units.

1	2. Summary of Cost Implications
2	If Evergy Missouri Metro imprudently purchased fuel oil, ratepayer harm could result
3	from increased FAC charges.
4	3. Conclusion
5	Staff found no indication Evergy Missouri Metro's costs associated with its fuel oil
6	contracts in place were imprudent during the Review Period.
7	4. Documents Reviewed
8	a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0023, 0025, 0035,
9	0035.1, 0045, 0066; and
10	b. Evergy Missouri Metro's monthly reports, FAR Filings and related work papers for
11	AP 7, 8, and 9.
12	Staff Expert/Witness: Lisa Wildhaber
13	H. Transmission Costs
14	1. Description
15	For the Review Period, $** $ ** or $** \equiv ** \%$ of Evergy Missouri Metro's
16	total fuel cost, purchased power costs, transmission costs and net emission costs was associated
17	with transmission costs. There were two tariff sheets that were in effect during this Review
18	Period. Evergy Missouri Metro's FAC Second Revised Sheet No. 50.14 (Applicable to Service
19	Provided July 1, 2018 through December 6, 2018), defines the "TC" component as:
20	Transmission Costs:
21 22	The following costs reflected in FERC Account Number 565:
23	
24 25	Subaccount 565000: non-SPP transmission used to serve off system sales or to make purchases for load and 20.91% of the SPP transmission
26	service costs which includes the schedules listed below as well as any
27 28	adjustments to the charges in the schedules below:
20 29	Schedule 7 – Long-term Firm and Short-term Point to Point
30	Transmission Service Schedule 8 – Non Firm Point to Point Transmission Service
31 32	Schedule 9 – Non Firm Point to Point Transmission Service Schedule 9 – Network Integration Transmission Service
33	Schedule 10 – Wholesale Distribution Service
34 35	Schedule 11 – Base Plan Zonal Charge and Region Wide Charge
33 36	Subaccount 565020: the allocation of the allowed costs in the 565000
37	account attributed to native load;

1 2 3 4 5 6	Subaccount 565027: the allocation of the allowed costs in the 565000 account attributed to transmission demand charges; Subaccount 565030: the allocation of the allowed costs in account 565000 attributed to off-system sales.
7	Evergy Missouri Metro's FAC Original Sheet No. 50.24 (Applicable to Service Provided
8	December 6, 2018 through December 31, 2019), defines the "TC" component as:
9	Transmission Costs:
10 11 12	The following costs reflected in FERC Account Number 565:
13	Subaccount 565000: non-SPP transmission used to serve off system sales
14	or to make purchases for load and 26.40% of the SPP transmission
15 16	service costs which includes the schedules listed below as well as any adjustments to the charges in the schedules below:
17	
18	Schedule 7 – Long-term Firm and Short-term Point to Point
19 20	Transmission Service Schedule 8 – Non Firm Point to Point Transmission Service
20 21	Schedule 8 – Non Firm Point to Point Transmission Service Schedule 9 – Network Integration Transmission Service
21	Schedule 10 – Wholesale Distribution Service
23	Schedule 11 – Base Plan Zonal Charge and Region Wide Charge
24	
25	Excluding amounts associated with portions of purchased power agreements
26	dedicated to specific customers under the Renewable Energy Rider tariff.
27 28	Subaccount 565020: the allocation of the allowed costs in the 565000
28 29	account attributed to native load;
30	
31	Subaccount 565027: the allocation of the allowed costs in the 565000
32	account attributed to transmission demand charges;
33	Scheroset 565020, the allocation of the allocation of the state in a sector
34 35	Subaccount 565030: the allocation of the allowed costs in account 565000 attributed to off-system sales.
36	For calculating TC, Evergy Missouri Metro implemented a process whereby total transmission
37	expenses were tabulated and then costs not allowed in the FAC were removed. Staff reviewed
38	the transmission costs over the Review Period to verify only 20.91% of the SPP transmission
39	service costs are included (from the beginning of the Review Period through December 5, 2018)
40	and only 26.40% of the SPP transmission service costs are included (from December 6, 2018

1	through the end of the Review Period). ²⁴ Evergy Missouri Metro's transmission costs during
2	the Review Period are \$** **.
3	2. Summary of Cost Implications
4	If Evergy Missouri Metro imprudently included transmission costs in the FAC,
5	ratepayer harm could result from increased FAC charges.
6	3. Conclusion
7	Staff found no indication that Evergy Missouri Metro's transmission costs were
8	imprudent during the Review Period.
9	4. Documents Reviewed
10	a. Evergy Missouri Metro's General Ledger;
11	b. Evergy Missouri Metro's responses to Staff Data Request Nos. 0001, 0002, 0023,
12	0040, 0045, and 0046; and
13	c. AP 7, 8 and 9 FAR and other supporting work papers.
14	Staff Expert/Witness: Brooke Mastrogiannis
15	
15	I. Nuclear Fuel
16	1. Description
17	For the Review Period \$** ** or ** ** % of Evergy Missouri Metro's
18	fuel costs, purchased power costs, transmission costs, and net emission allowance costs is
19	associated with nuclear fuel used in the generation of electricity at the Wolf Creek Nuclear
20	Operating Corporation's generating unit. Evergy Missouri Metro owns 47% of Wolf Creek
21	
22	Nuclear Operating Corporation.
	Nuclear Operating Corporation.2.Summary of Cost Implications
23	
	2. Summary of Cost Implications
23	 2. Summary of Cost Implications If Evergy Missouri Metro was imprudent in its purchasing decisions relating to nuclear
23 24	2. Summary of Cost Implications If Evergy Missouri Metro was imprudent in its purchasing decisions relating to nuclear fuel, ratepayer harm could result from increased FAC charges.

²⁴ During the last general rate case, Case No. ER-2018-0145, the Commission, in its *Order Approving Stipulations and Agreements* issued on October 31, 2018, approved the change of the FAC transmission percentage from 20.91% to 26.40%.

4. **Documents Reviewed** 1 2 a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0023, 0035, 0045, 3 0066; and 4 b. Evergy Missouri Metro's monthly reports, FAR Filings and related work papers for 5 AP 7, 8, and 9. 6 Staff Expert/Witness: Lisa Wildhaber 7 J. **Emission Allowances** 8 1. Description 9 The Cross-State Air Pollution Rule ("CSAPR") is a ruling by the United States 10 Environmental Protection Agency ("EPA") that requires a number of states, including Missouri, 11 to reduce power plant emissions that contribute to ozone and/or fine particle pollution in other 12 states. The CSAPR replaced EPA's 2005 Clean Air Interstate Rule ("CAIR"), following the 13 direction of a 2008 court decision that required EPA to issue a replacement regulation. CSAPR 14 implementation began on January 1, 2015. 15 The CSAPR requires Missouri to reduce its annual emissions of sulfur dioxide (SO₂) 16 and nitrous oxides (NO_x) to help downwind states attain the 24-hour National Ambient Air 17 Quality Standards ("NAAQS"). The CSAPR also requires Missouri to reduce ozone season 18 emissions of NO_x to help downwind states attain the 8-hour NAAQS. 19 On September 7, 2016, the EPA revised the CSAPR ozone season NO_x program by 20 finalizing an update to CSAPR for the 2008 ozone NAAQS, known as the CSAPR Update. The 21 CSAPR Update ozone season NO_x program largely replaced the original CSAPR ozone season 22 NO_x program starting on May 1, 2017. The CSAPR Update further reduced summertime NO_x 23 emissions from power plants in the eastern U.S. According to Evergy Missouri Metro, there 24 were no operational adjustments needed to comply with the CSAPR requirements. 25 The primary mechanism of CSAPR is a cap-and-trade program that allows a 26 major source of NO_X and/or SO_2 to trade excess allowances when its emissions of a 27 specific pollutant fall below its cap for that pollutant. Originally, the EPA issued a model 28 cap-and-trade program for power plants, which could have been used by states as the 29 primary control mechanism under CAIR. This model, with modifications, had continued

30

under CSAPR.

1	To comply with CSAPR, Evergy Missouri Metro established an inventory for SO2 and
2	NO_x . Evergy Missouri Metro currently plans to maintain this SO_2 and NO_x allowance inventory
3	sufficient to offset expected emissions. This inventory is tracked in Company account 158100
4	for Emissions Allowance Inventory and accounts 158200, 158201 and 158500 for Emission
5	Allowance REC inventories. The Evergy Missouri Metro SO_2 and NO_x allowance inventories
6	are valued at average cost, and the cost for SO_2 and NO_x allowances is tracked in FERC Account
7	Number 509000. For the Review Period, the SO ₂ total balance in the emission inventory
8	accounts as of December 31, 2019 was \$** **. The Company annually balances
9	account 509000 when the EPA yearly awards the additional allowances.
10	For the Review Period, Evergy Missouri Metro's total net emission allowance cost was
11	\$** <u>**</u> ** ²⁵
12	2. Summary of Cost Implications
13	If Evergy Missouri Metro imprudently used, purchased or banked its SO_2 and NO_x
14	allowances, ratepayer harm could result from an increase in Evergy Missouri Metro's
15	FAC charges.
16	3. Conclusion
17	Staff found no indication that Evergy Missouri Metro was imprudent in its purchases,
18	banking, or usage of CSAPR NOx and SO ₂ allowances.
19	4. Documents Reviewed
20	a. Evergy Missouri Metro's response to Staff's Data Request Nos. 0032, 0034, 0039,
21	0045, 0059, 0060, 0061 and 0062;
22	b. Evergy Missouri Metro's monthly reports for the time period July 1, 2018 through
23	December 31, 2019 required by 20 CSR 4240-20.090(5); and
24	c. Section 8 Filings – 7 th , 8 th and 9 th Accumulation Periods (ending December 2018,
25	June 2019, December 2019 respectively).
26	Staff Expert/Witness: Cynthia M. Tandy
	25 **
	23 ** **

7

8

9

10

11 12

13 14

15

16

17

18 19

20

21 22

23 24

25

26

27 28

29

30

31 32

33

34 35

36 37 K.

Off-System Sales Revenue

1. Description

Off-system sales revenues ("OSSR") is a component in the calculation of Evergy
Missouri Metro's FAR used to charge or refund fuel and purchased power costs to its customers.
There were two tariff sheets that were in effect during this Review Period. The following
language was in effect during the Review Period includes:

Evergy Missouri Metro's FAC P.S.C. MO No. 7, Second Revised Sheet No. 50.14, applicable to service provided from June 8, 2017 through December 6, 2018, defines the "OSSR" component as:

- OSSR = Revenues from Off-System Sales:
 - The following revenues or costs reflected in FERC Account Number 447:

Subaccount 447020: all revenues from off-system sales. This includes charges and credits related to the SPP IM including, energy, ancillary services, revenue sufficiency (such as make whole payments and out of merit payments and distributions), revenue neutrality payments and distributions, over collected losses payments and distributions, TCR and ARR settlements, demand reductions, virtual energy costs and revenues and related fees where the virtual energy transaction is a hedge in support of physical operations related to a generating resource or load, generation/export charges, ancillary services including non-performance and distribution payments and SPP uplift revenues or credits. Off-system sales revenues from full and partial requirements sales to municipalities that are served through bilateral contracts in excess of one year shall be excluded from OSSR component;

Subaccount 447012: capacity charges for capacity sales one year or less in duration;

Subaccount 447030: the allocation of the includable sales in account 447020 not attributed to retail sales.

1 2 3	Evergy Missouri Metro's FAC P.S.C. MO No. 7, Original Sheet No. 50.24, applicable to service provided from December 6, 2018 through December 31, 2019 defines the "OSSR" component as:
4	• OSSR = Revenues from Off-System Sales:
5	• The following revenues or costs reflected in FERC Account Number
6	447:
7	
8	Subaccount 447020: all revenues from off-system sales.
9	This includes charges and credits related to the SPP IM,
10	or other IMs, including, energy, ancillary services,
11	revenue sufficiency (such as make whole payments and
12 13	out of merit payments and distributions), revenue
15 14	neutrality payments and distributions, over collected losses payments and distributions, TCR and ARR
14	settlements, demand reductions, virtual energy costs and
16	revenues and related fees where the virtual energy
17	transaction is a hedge in support of physical operations
18	related to a generating resource or load, generation/export
19	charges, ancillary services including non-performance
20	and distribution payments and SPP uplift revenues or
21	credits, but excluding (1) off-system sales revenues from
22	full and partial requirements sales to municipalities that
23	are served through bilateral contracts in excess of one
24 25	year and (2) the amounts associated with purchased
25 26	power agreements associated with the Renewable Energy Rider tariff. Additional revenue will be added at an
20 27	inputed 75% of the unsubscribed portion associated with
28	the Solar Subscription Rider valued at market prices;
29	
30	Subaccount 447012: capacity charges for capacity sales
31	one year or less in duration;
32	
33	Subaccount 447030: the allocation of the includable sales
34	in account 447020 not attributed to retail sales.
35	Staff reviewed the off-system sales quantities and revenues over the Review Period, and
36	Evergy Missouri Metro's off-system sales revenue recoverable under the FAC was in the
37	amount of \$** **.
38	2. Summary of Cost Implications
39	Evergy Missouri Metro's revenues from off-system sales are an offset against total
40	fuel and purchased power costs, transmission costs and net emission costs. This is because
41	Evergy Missouri Metro's ratepayers pay for the resources used to produce any energy that

Evergy Missouri Metro sells. Since implementing the IM, SPP has controlled the economic
 dispatch of Evergy Missouri Metro's generation. During times that Evergy Missouri Metro's
 generation exceeds Evergy Missouri Metro's retail customers' needs, Evergy Missouri Metro
 becomes a net seller in the SPP IM. If Evergy Missouri Metro did not make available its
 generating units in the SPP IM for off-system sales to be made, ratepayers could be harmed by
 such imprudence by an increase in Evergy Missouri Metro's FAC charges.

3. Conclusion

Staff found no indication that Evergy Missouri Metro imprudently withheld availability of its generating units in the SPP for off-system sales to be made.

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

4. Documents Reviewed

- a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0023, 0045 and 0056;
- b. Evergy Missouri Metro's FAC tariff sheet during the Review Period; and

c. Evergy Missouri Metro's monthly reports and FAR filing work sheets.

Staff Expert/Witness: Cynthia M. Tandy

L. Renewable Energy Credit Revenues

1. Description

The Missouri Renewable Energy Standard ("RES")²⁶ requires all investor-owned electric utilities in Missouri to provide at least two percent (2%) of their retail electricity sales using renewable energy resources in each calendar year 2011 through 2013, and to increase that percentage over time to at least fifteen percent (15%) by 2021. Commission rule 20 CSR 4240-20.100, Electric Utility Renewable Energy Standard Requirements, which first became effective September 30, 2010, contains the definitions, structure, operations, and procedures for implementing the RES.

The RES rule creates two categories of energy-generating resources: non-renewable energy resources (including purchased power from non-renewable energy sources) and renewable energy resources (including purchased power from renewable energy sources).²⁷ Renewable energy resources produce electrical energy and are wind, solar sources, thermal

²⁶ Section 393.1020 RSMo. Supp. 2013 and Section 393.1030.1(1), RSMo. Supp. 2013.

²⁷ 20 CSR 4240-20.100(5)(B).

sources, hydroelectric sources, photovoltaic cells and panels, fuel cells using hydrogen 1 produced by one (1) of the above named electrical energy sources, and other sources of energy 2 3 that become available after August 28, 2007, and are certified as renewable by the Missouri Department of Natural Resources – Division of Energy ("Division of Energy")²⁸. Once an 4 5 energy resource is certified, it begins producing RECs, with one (1) REC representing one (1) 6 megawatt-hour of electricity that has been generated from the renewable energy resource. 7 These RECs can be sold and/or traded in the market place bundled with or without the energy that generated the REC.²⁹ The cost of a REC (as a RES compliance cost) cannot be recovered 8 through the FAC.³⁰ Revenues from the sale of RECs are recovered through the FAC as an 9 10 off-set to fuel costs. During the Review Period, the RES rule required Evergy Missouri Metro 11 to serve at least 10% of its retail load using renewable energy resources.

In Staff Data Request No. 0058, Staff asked, "Did Evergy Missouri Metro sell any RECs (wind, solar, etc.) during the review period of July 1, 2018 through December 31, 2019? If yes, a list of data was requested. "If no, please provide the reason why no RECS were sold." Evergy Missouri Metro responded, "Evergy Missouri Metro did not sell any RECs during the review period of July 1, 2018 through December 31, 2019... Evergy RECs are expired rather than sold to ensure our customers receive as much renewable energy as possible since we cannot double count sold RECs as renewable energy delivered to customers."

Review of Data Request No. 0042 in this case along with review of this issue in Case Nos. EO-2020-0280³¹ and EO-2020-0331³², suggests the number of RECs will increase significantly in the coming years with more production of renewable energy. Even when the maximum level of the RES rule requirement of 15% is reached in 2021, the Company's excess RECs are forecasted to increase significantly in the coming years. The following table is information on this issue from 2018 to 2019:

12

13

14

15

16

17

18

19

20

21

22

²³ 24

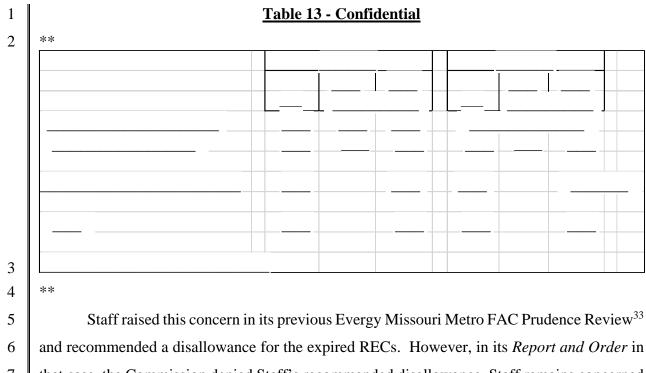
²⁸ Prior Department of Economic Development – Division of Energy.

 $^{^{29}\ 20\} CSR\ 4240\mathchar`-20.100(6)(B)(5)(J).$

³⁰ 20 CSR 4240-20.100(6)(A)(16).

³¹ The 2020 Integrated Resource Plan Annual Update for Evergy Missouri Metro.

³² The 2020 Renewable Energy Standard Compliance Plan for Evergy Missouri Metro.



that case, the Commission denied Staff's recommended disallowance. Staff remains concerned with the continued growth of expired RECs in this Review Period and the likelihood of even more significant growth of expired RECs in subsequent years following this Review Period due to the additional wind PPAs discussed in the PPA section of this Staff Report. According to Staff calculations, the Missouri jurisdictional annual generation is expected to be well in excess of the projected 2022 RES compliance. The Company has indicated that this is being monitored, but the concern still exists. Staff too will continue to monitor this issue and reserves the right to bring this issue, and any ratepayer implications due to this issue, up in future prudence reviews.

Evergy Missouri Metro's annual REC production/acquired from existing non-solar resources for the Review Period was ** ______ ** RECs, well in excess of the actual requirements of ** ______ **, with ** ______ ** RECs that expired.

Summary of Cost Implications

2.

If Staff found that Evergy Missouri Metro was imprudent in its management of RECs, by including the cost of RECs in calculating its FAC charges, ratepayer harm could result from increased costs or decreased revenues in its FAC charges. Potential ratepayer harm could result if excess RECs are continued to be allowed to expire rather than be sold.

³³ Case No. EO-2019-0068 consolidated into Case No. EO-2019-0067.

1	3. Conclusion
2	With regards to FAC prudency, Staff did not find evidence that Evergy Missouri
3	Metro's management of its RECs during the Review Period was imprudent. However, this is
4	an issue that needs to be closely monitored and Staff will continue to address this issue in future
5	prudence reviews.
6	4. Documents Reviewed
7	a. Staff Data Request Nos. 0042, 0042.1 0057 and 0058;
8	b. The 2020 Integrated Resource Plan Annual Update for Evergy Missouri Metro;
9	c. The 2020 Renewable Energy Standard Compliance Plan for Evergy Missouri Metro; and
10	d. Case Nos. EO-2019-0068 and EO-2019-0067.
11	Staff Expert/Witness: Cynthia M. Tandy
10	M. Martin a Commentin - Iluit
12	M. Montrose Generating Unit
13	1. Description
14	In Case No. ER-2020-0221, FAR filing for AP9, which covers the AP months of
15	July 2019 through December 2019, Evergy Missouri Metro agreed to remove all fuel residuals
16	costs subsequent to the retirement of the Montrose generating station at the end of December
17	2018 in their substitute tariff filing filed on February 25, 2019. AP9 was the first filing in which
18	the Company agreed to exclude any Montrose costs in future FAC filings. This resulted in a
19	total reduction of \$122,874. These costs were described in detail as ash cleanup and landfill
20	work at the Montrose generating station. ³⁴ Evergy Missouri Metro also stated in this substitute
21	tariff filing that "Finally, the Company included fuel residual costs totaling \$122,874 for
22	recovery in this filing. These expenses consist of ash disposal costs, contractor costs, materials
23	and landfill work that continues at the Montrose generating station in order to appropriately
24	dispose of the residuals. Based on internal discussions following MPSC Staff's review of the
25	filing, the Company will remove the costs for recovery through the FAC." ³⁵ There were two
26	remaining adjustments amounting to \$9,397 that the Company discussed with Staff. These two
27	components were: \$7,723 for an invoice that was coded incorrectly to Montrose, which was

³⁴ Lisa A. Starkebaum's supplemental testimony filed on 2/25/2020, in Case No. ER-2020-0221 Page 2, Lines 3 and 4.

³⁵ *Ibid*.

corrected in February 2020 and will be included in the next FAR filing for AP10; and \$1,674 1 2 for severance and Ad-Valorem Tax True-up adjustments for 2017 coal shipments received from 3 a supplier in 2019. The discussion satisfied Staff's concerns, and Staff recommended approval 4 of the substitute tariff filing in Staff's Recommendation filed on February 28, 2020.

In Case No. ER-2020-0025, FAR filing for AP8, which covers the AP months of January 2019 through June 2019, Evergy Missouri Metro included Montrose costs netted to a credit of (\$16,185) included for recovery in the FAR filing. Staff conducted its review of the filing and recommended approval in Staff's Recommendation filed on August 29, 2019.

This Review Period also encompasses the FAR filing for AP7, Case No. ER-2019-0223, for the AP months of July 2018 through December 2018. Even though the Montrose generation facility did not retire until December 2018, it remains Staff's due diligence to review the costs associated with Montrose to ensure there was no inclusion of costs/revenues related to the retirement of the Montrose generation facility similar to those that the Company previously agreed to remove during those accumulation period months as well.

During Staff's investigation, Staff found that the Company included costs totaling \$1,159,839 for recovery in November and December 2018 associated with Montrose. This \$1,159,839 is comprised of \$723,237 for the cost of coal PRB, \$76,303 for the cost of oil PRB, \$332,603 for the cost of coal PRB physical inventory adjustment, \$8,420 for fuel additives, and \$19,276 for fuel residuals.³⁶ The Company states that it does not consider the expenses recorded in November and December 2018 to be retirement or decommissioning costs. It also states these costs were recorded in the appropriate expense accounts that are allowed to flow through the FAC as set forth in the Evergy Missouri Metro FAC tariff with specific language under fuel costs, subaccount 501000:

- 24 25
- Coal commodity and transportation
- Unit train maintenance, leases, taxes and depreciation
- Fuel quality adjustments •
 - Oil costs for commodity
 - Coal and oil inventory adjustments

5

6

7

8

³⁶ Response to Staff Data Request Nos. 0064.1 and 0064.2.

1

The Company also states:

Montrose did generate MWh's in December 2018 even though it was retired later that month. The Montrose retirement does not follow the same fact pattern as Sibley, so yes, those costs incurred during November-December 2018 timeframe are indeed different than costs incurred for Sibley in November 2018. Fuel expense was incurred at Montrose during December 2018 because Montrose unit 3 burned both coal and oil and generated electricity in early December until a forced outage on December 10, 2018 and therefore are recoverable through the FAC.³⁷

Staff has reviewed the Company's workpapers to verify that Evergy Missouri Metro did have 11,887 tons of coal and 851 barrels of oil burned during December 2018, along with generating \$14,571 net MWhs that created the cost of coal and oil included in fuel expense for December 2018.

Staff also reviewed workpapers the Company provided to support the costs associated with coal PRB and oil PRB, as these are costs related to Fuelworx ("FWX"), which is a software package interface to the general ledger. FWX tracks fuel receipts and inventory levels and calculates fuel expenses based on the average inventory cost and the amount of fuel burned as reported by the generating stations. Evergy Missouri Metro has used the FWX software since the FAC has been in place, and FWX is the primary source of Evergy Missouri Metro's fuel expense calculations that are recorded to the general ledger each month. Evergy Missouri Metro also provided additional information supporting the physical inventory adjustment. As described in response to Data Request No. 0064.2, Evergy Missouri Metro states, "there were no remaining tons of usable coal available for use at Montrose. Once all usable coal had been burned, a physical inventory adjustment of 6,611 tons was recorded to reduce the book inventory to zero. The process of measuring the amount of coal burned is not a precise process and therefore physical inventories are performed annually to ensure that the inventory amount recorded on the books and the inventory amount physically on the ground stay in a reasonably close relationship to each other. The physical inventory adjustment of 6,611 tons and \$332,603 in expense was the difference in the amount of inventory recorded on the books and the physical inventory at the plant, which was zero."38 Staff agrees with the cost of coal PRB physical

³⁷ Response to Staff Data Request No. 0064.2.

³⁸ Response to Staff Data Request No. 0064.3.

inventory adjustment because it was a physical inventory accounting adjustment necessary to
 get the books to zero once all the coal had been burned. In addition, the Evergy Missouri Metro
 tariff sheet specifically states that coal and oil inventory adjustments are allowable under
 account 501000.

11

12

13

14

15

16

2. Summary of Cost Implications

If Evergy Missouri Metro's use of the FAC to recover Montrose generation plant costs was imprudent, ratepayer harm could result from an increase in FAC charges.

3. Conclusion

Staff found no indication that Evergy Missouri Metro imprudently included costs associated with the retirement of Montrose during the Review Period.

4. Documents Reviewed

- a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0064, 0064.1, 0064.2, 0064.3, and 0064.4;
 - b. Evergy Missouri Metro's General Ledger; and
 - c. FAR supporting workpapers in Case Nos. ER-2019-0221, ER-2020-0025, and ER-2020-0221.
- 17 Staff Expert/Witness: Brooke Mastrogiannis

18

19

N. Cimarron 2 Wind Farm Purchased Power Agreement

1. Description

20 Evergy Missouri Metro has a long-term (20-year) PPA with CPV Cimarron II 21 Renewable Energy Company, LLC for energy and RECs generated by the Cimarron 2 Wind Farm located in Kansas. The contract is based on ** ____ ** MW of capacity that Evergy 22 Missouri Metro began receiving on June 1, 2012 at a fixed price of \$** ** per MWh. The 23 24 contract is a "take-or pay" contract (i.e., Evergy Missouri Metro has to receive and pay for the 25 energy whether it needs the energy or not), which is a standard feature of many wind PPAs. 26 The contract is for the energy and RECs generated by the wind farm. In its response to Staff Data Request No. 0058 Evergy Missouri Metro stated, "Evergy MO Metro did not sell any 27 28 RECs during the Review Period of July 1, 2018 through December 31, 2019." Total costs of 29 electricity under the Cimarron 2 PPA was \$** ** with revenue associated with sales of \$** ** which resulted in a net loss of \$** ** for the Review Period. 30

4

5

6

7

8

9

10

11

12

13

14

2. Summary of Cost Implications

If Evergy Missouri Metro was imprudent by purchasing energy to meet its demand at a cost that exceeded Evergy Missouri Metro's cost to generate that energy itself, ratepayer harm could result from that imprudence through an increase in FAC charges. Commission Rule 20 CSR 4240-20.090(1)(B) and (C) and Evergy Missouri Metro's FAC allow purchased power costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found no indication that Evergy Missouri Metro imprudently included the Cimarron Wind Farm PPA costs in the FAC.

3. Conclusions

Staff has identified that the Cimarron Wind Farm PPA is creating a significant amount of additional costs compared to the revenue received. Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is not recommending a disallowance related to this issue at this time.

15 16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

4. Documents Reviewed

- a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0001, 0002, 0020, 0023, 0043, 0045, 0046, 0053, and 0058;
- b. Evergy Missouri Metro 2018 Annual Renewable Energy Standard Compliance Plan;
- c. Evergy Missouri Metro 2019 Annual Renewable Energy Standard Compliance Plan;
- d. Staff Report in Case No. EO-2018-0290; and
- e. Staff Report in Case No. EO-2019-0317.

Staff Expert/Witness: Brooke Mastrogiannis

O. Slate Creek Wind Project Purchased Power Agreement

1. Description

Evergy Missouri Metro has a long-term (20-year) PPA with Slate Creek Wind Project, LLC for energy and RECs generated by the Slate Creek Wind Project beginning in November 2015. The contract is also a "take-or pay" contract for renewable wind energy and RECs (i.e., Evergy Missouri Metro has to receive and pay for the energy whether it needs the energy or not), and is based on a fixed energy price of \$** _____ ** per MWh and a capacity of ** _____ ** MW. In its response to Staff Data Request No. 0058 Evergy Missouri Metro stated, "Evergy MO Metro did not sell any RECs during the Review Period of July 1, 2018 through December 31, 2019". Cost of electricity under the Slate Creek Wind Project PPA was
 \$** ______** with revenue associated with sales of \$** ______** which resulted in a
 net loss of \$** ______** for the Review Period.

4

5

6

7

8

9

10

11

12

13

14

15

16

17

19

20

21

22

23

24

25

Summary of Cost Implications

If Evergy Missouri Metro was imprudent by purchasing energy to meet its demand at a cost that exceeded Evergy Missouri Metro's cost to generate that energy itself, ratepayer harm could result from that imprudence through an increase in FAC charges. Commission Rule 20 CSR 4240-20.090(1)(B) and (C) and Evergy Missouri Metro's FAC allow purchased power costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found no indication that Evergy Missouri Metro imprudently included the Slate Creek Wind Farm PPA costs in the FAC.

3. Conclusions

2.

Staff has identified that the Slate Creek Wind Farm PPA is creating a significant amount of additional costs compared to the revenue received. Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is not recommending a disallowance related to this issue at this time.

18

4. Documents Reviewed

- a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0001, 0002, 0020, 0023, 0043, 0045, 0046, 0053, and 0058;
- b. Evergy Missouri Metro 2018 Annual Renewable Energy Standard Compliance Plan;
- c. Evergy Missouri Metro 2019 Annual Renewable Energy Standard Compliance Plan;
- d. Staff Report in Case No. EO-2018-0290; and
- e. Staff Report in Case No. EO-2019-0317.

Staff Expert/Witness: Brooke Mastrogiannis

26 27

P. Osborn Wind Energy Purchased Power Agreement

1. Description

Evergy Missouri Metro has a long-term (20-year) PPA with NextEra Energy Resources for energy and RECs generated by the Osborn Wind Energy Center located in Missouri. The contract is based on a fixed price of \$** _____ ** per MWh and ** _____ ** MW of capacity that Evergy Missouri Metro began receiving in December 2016. In its response to Staff Data 1 Request No. 0058 Evergy Missouri Metro stated, "Evergy MO Metro did not sell any RECs during the Review Period of July 1, 2018 through December 31, 2019". The contract is a "take-or pay" contract (i.e., Evergy Missouri Metro has to receive and pay for the energy whether it needs the energy or not), which is a standard feature of many wind PPAs. The contract is for the energy and RECs generated by the wind farm. Cost of electricity under the Osborn Wind Energy PPA was \$** ** with revenue associated with sales of \$** ** which resulted in a net loss of \$** ** for the Review Period.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

2. **Summary of Cost Implications**

If Evergy Missouri Metro was imprudent by purchasing energy to meet its demand at a cost that exceeded Evergy Missouri Metro's cost to generate that energy itself, ratepayer harm could result from that imprudence through an increase in FAC charges. Commission Rule 20 CSR 4240-20.090(1)(B) and (C) and Evergy Missouri Metro's FAC allow purchased power costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found no indication that Evergy Missouri Metro imprudently included the Osborn Wind Farm PPA costs in the FAC.

3. Conclusions

Staff has identified that the Osborn Wind Farm PPA is creating a significant amount of additional costs compared to the revenue received. Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is not recommending a disallowance related to this issue at this time.

4. **Documents Reviewed**

- a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0001, 0002, 0020, 0023, 0043, 0045, 0046, 0053, and 0058;
- b. Evergy Missouri Metro 2018 Annual Renewable Energy Standard Compliance Plan;
- c. Evergy Missouri Metro 2019 Annual Renewable Energy Standard Compliance Plan;
- d. Staff Report in Case No. EO-2018-0290; and
- e. Staff Report in Case No. EO-2019-0317.

29 Staff Expert/Witness: Brooke Mastrogiannis

Q. Spearville 3 Wind Energy Facility Purchased Power Agreement

1. Description

Evergy Missouri Metro has a long-term (20-year) PPA with Spearville 3, LLC for energy and RECs generated by the Spearville 3 Wind Energy Facility located in Kansas. The contract is based on a fixed price of \$** _____ ** per MWh and ** _____ ** MW of capacity that Evergy Missouri Metro began receiving in October 2012. The contract is a "take-or pay" contract (i.e., Evergy Missouri Metro has to receive and pay for the energy whether it needs the energy or not), which is a standard feature of many wind PPAs. The contract is for the energy and RECs generated by the wind farm. In its response to Staff Data Request No. 0058 Evergy Missouri Metro stated, "Evergy MO Metro did not sell any RECs during the Review Period of July 1, 2018 through December 31, 2019". Cost of electricity under the Spearville 3 PPA was \$** _____ ** with revenue associated with sales of \$** _____ ** which resulted in a net loss of \$** _____ ** for the Review Period.

2. Summary of Cost Implications

If Evergy Missouri Metro was imprudent by purchasing energy to meet its demand at a cost that exceeded Evergy Missouri Metro's cost to generate that energy itself, ratepayer harm could result from that imprudence through an increase in FAC charges. Commission Rule 20 CSR 4240-20.090(1)(B) and (C) and Evergy Missouri Metro's FAC allow purchased power costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found no indication that Evergy Missouri Metro imprudently included the Spearville 3 Wind Energy PPA costs in the FAC.

3. Conclusions

Staff has identified that the Spearville 3 Wind Energy PPA is creating a significant amount of additional costs compared to the revenue received. Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is not recommending a disallowance related to this issue at this time.

4. Documents Reviewed

Evergy Missouri Metro's responses to Staff Data Request Nos. 0001, 0002, 0020, 0023, 0043, 0045, 0046, 0053, and 0058;

b. Evergy Missouri Metro 2018 Annual Renewable Energy Standard Compliance Plan;

- c. Evergy Missouri Metro 2019 Annual Renewable Energy Standard Compliance Plan;
- d. Staff Report in Case No. EO-2018-0290; and
- e. Staff Report in Case No. EO-2019-0317.

Staff Expert/Witness: Brooke Mastrogiannis

R. Waverly Wind Farm Purchased Power Agreement

1. Description

Evergy Missouri Metro has a long-term (20-year) PPA with Waverly Wind Farm, LLC for energy and RECs generated by the Waverly Wind Farm beginning in November 2015. The contract is also a "take-or pay" contract for renewable wind energy and RECs (i.e., Evergy Missouri Metro has to receive and pay for the energy whether it needs the energy or not), and is based on a fixed energy price of \$** _____ ** per MWh and a capacity of ** _____ ** MW. In its response to Staff Data Request No. 0058 Evergy Missouri Metro stated, "Evergy MO Metro did not sell any RECs during the Review Period of July 1, 2018 through December 31, 2019". Cost of electricity under the Waverly Wind Farm PPA was \$** ______ ** with revenue associated with sales of \$** ______ ** which resulted in a net loss of \$** ______ ** for the Review Period.

2. Summary of Cost Implications

If Evergy Missouri Metro was imprudent by purchasing energy to meet its demand at a cost that exceeded Evergy Missouri Metro's cost to generate that energy itself, ratepayer harm could result from that imprudence through an increase in FAC charges. Commission Rule 20 CSR 4240-20.090(1)(B) and (C) and Evergy Missouri Metro's FAC allow purchased power costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found no indication that Evergy Missouri Metro imprudently included the Waverly Wind Farm PPA costs in the FAC.

3. Conclusions

30 Staff has identified that the Waverly Wind Farm PPA is creating a significant amount 31 of additional costs compared to the revenue received. Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the
 results during this Review Period. Staff is not recommending a disallowance related to this issue
 at this time.

4. 4 **Documents Reviewed** 5 a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0001, 0002, 0020, 0023, 0043, 0045, 0046, 0053, and 0058; 6 7 b. Evergy Missouri Metro 2018 Annual Renewable Energy Standard Compliance Plan; 8 c. Evergy Missouri Metro 2019 Annual Renewable Energy Standard Compliance Plan; 9 d. Staff Report in Case No. EO-2018-0290; and 10 e. Staff Report in Case No. EO-2019-0317. 11 Staff Expert/Witness: Brooke Mastrogiannis 12 S. **Rock Creek Wind Project Purchased Power Agreement** 13 1. Description 14 Evergy Missouri Metro has a long-term (20-year) PPA with Rock Creek Wind Project, 15 LLC for energy and RECs generated by the Rock Creek Wind Farm located in Missouri. 16 The contract is also a "take-or pay" contract for renewable wind energy and RECs (i.e., Evergy 17 Missouri Metro has to receive and pay for the energy whether it needs the energy or not), and is based on a fixed energy price of \$** ** per MWh and a capacity of ** ____ ** MW, 18 19 beginning August 2017. In its response to Staff Data Request No. 0058 Evergy Missouri Metro 20 stated, "Evergy MO Metro did not sell any RECs during the Review Period of July 1, 2018 21 through December 31, 2019". Cost of electricity under the Rock Creek Wind Project was \$** 22 ** with revenue associated with sales of \$** ** which resulted in ** for the Review Period. 23 a net loss of \$** 24 **Summary of Cost Implications** 2. 25 If Evergy Missouri Metro was imprudent by purchasing energy to meet its demand at a 26 cost that exceeded Evergy Missouri Metro's cost to generate that energy itself, ratepayer harm 27 could result from that imprudence through an increase in FAC charges. Commission Rule

28 20 CSR 4240-20.090(1)(B) and (C) and Evergy Missouri Metro's FAC allow purchased power
29 costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found
30 no indication that Evergy Missouri Metro imprudently included the Rock Creek Wind Project
31 PPA costs in the FAC.

- 1 3. Conclusions 2 Staff has identified that the Rock Creek Wind Project PPA is creating a significant 3 amount of additional costs compared to the revenue received. Staff notes this is a long-term 4 PPA and the performance of this contract should be viewed on a long-term basis and not just 5 from the results during this Review Period. Staff is not recommending a disallowance related 6 to this issue at this time. 7 **Documents Reviewed** 4. 8 a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0001, 0002, 0020, 9 0023, 0043, 0045, 0046, 0053, and 0058; 10 b. Evergy Missouri Metro 2018 Annual Renewable Energy Standard Compliance Plan; 11 c. Evergy Missouri Metro 2019 Annual Renewable Energy Standard Compliance Plan; 12 d. Staff Report in Case No. EO-2018-0290; and 13 e. Staff Report in Case No. EO-2019-0317. 14 Staff Expert/Witness: Brooke Mastrogiannis **Prairie Queen Wind Purchased Power Agreement** 15 T. 1. Description 16 17 Evergy Missouri Metro has a long-term (20-year) PPA with Prairie Queen Wind Farm, 18 LLC for energy and RECs generated by the Prairie Queen Wind Farm located in Kansas. 19 The contract is also a "take-or pay" contract for renewable wind energy and RECs (i.e., Evergy 20 Missouri Metro has to receive and pay for the energy whether it needs the energy or not), and is based on a fixed energy price of \$** ** per MWh and a capacity of ** ____ ** MW, 21 22 beginning May 2019. In its response to Staff Data Request No. 0058 Evergy Missouri Metro 23 stated, "Evergy MO Metro did not sell any RECs during the Review Period of July 1, 2018 through December 31, 2019". Cost of electricity under the Prairie Queen Wind Project was 24 \$** ** with revenue associated with sales of \$** ** which resulted in a 25 ** for the Review Period. net gain of \$** 26
- 27

2. Summary of Cost Implications

If Evergy Missouri Metro was imprudent by purchasing energy to meet its demand at a
cost that exceeded Evergy Missouri Metro's cost to generate that energy itself, ratepayer harm
could result from that imprudence through an increase in FAC charges. Commission Rule

20 CSR 4240-20.090(1)(B) and (C) and Evergy Missouri Metro's FAC allow purchased power
 costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found
 no indication that Evergy Missouri Metro imprudently included the Prairie Queen Wind PPA
 costs in the FAC.

5 6

7

8

9

3. Conclusions

Staff has identified that the Prairie Queen Wind PPA is creating more revenue received than additional costs. Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is not recommending a disallowance related to this issue at this time.

10

11

12

13

14

15

16

17

4. Documents Reviewed

- a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0001, 0002, 0020, 0023, 0043, 0045, 0046, 0053, 0058, 0067, 0068, 0069, and 0070;
- b. Evergy Missouri Metro 2018 Annual Renewable Energy Standard Compliance Plan;
- c. Evergy Missouri Metro 2019 Annual Renewable Energy Standard Compliance Plan;
- d. Staff Report in Case No. EO-2018-0290; and
- e. Staff Report in Case No. EO-2019-0317.

Staff Expert/Witness: Brooke Mastrogiannis

18

19

20

21

22

23

24

25

26

27

28

29

U. Pratt Wind Purchased Power Agreement

1. Description

Evergy Missouri Metro has a long-term (30-year) PPA with Pratt Wind, LLC for energy and RECs generated by the Pratt Wind Farm located in Kansas. The contract is also a "take-or pay" contract for renewable wind energy and RECs (i.e., Evergy Missouri Metro has to receive and pay for the energy whether it needs the energy or not), and is based on a fixed energy price of \$** _____ ** per MWh and a capacity of ** _____ ** MW, beginning November 2018. In its response to Staff Data Request No. 0058 Evergy Missouri Metro stated, "Evergy MO Metro did not sell any RECs during the Review Period of July 1, 2018 through December 31, 2019". Cost of electricity under the Pratt Wind Project was \$** ______ ** with revenue associated with sales of \$** ______ ** which resulted in a net loss of \$** ______ ** for the Review Period.

2. Summary of Cost Implications

If Evergy Missouri Metro was imprudent by purchasing energy to meet its demand at a cost that exceeded Evergy Missouri Metro's cost to generate that energy itself, ratepayer harm could result from that imprudence through an increase in FAC charges. Commission Rule 20 CSR 4240-20.090(1)(B) and (C) and Evergy Missouri Metro's FAC allow purchased power costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found no indication that Evergy Missouri Metro imprudently included the Pratt Wind PPA costs in the FAC.

3. Conclusion

Staff has identified that the Prairie Queen Wind PPA is creating more additional costs compared to the revenue received. Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is not recommending a disallowance related to this issue at this time.

4. Documents Reviewed

- a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0001, 0002, 0020, 0023, 0043, 0045, 0046, 0053, 0058, 0067, 0068, 0069, 0070 and 0071;
- b. Evergy Missouri Metro 2018 Annual Renewable Energy Standard Compliance Plan;
- c. Evergy Missouri Metro 2019 Annual Renewable Energy Standard Compliance Plan;
 - d. Staff Report in Case No. EO-2018-0290; and
- e. Staff Report in Case No. EO-2019-0317.
- Staff Expert/Witness: Brooke Mastrogiannis
 - V. Purchased Power Costs

1. Description

Evergy Missouri Metro's FAC Second Revised Sheet No. 50.13, applicable to service provided from July 1, 2018 through December 6, 2018, and Original Sheet No. 50.23, applicable to service provided from December 6, 2018 through the effective date of this tariff sheet and thereafter, define the Purchased Power Costs ("PP") components, which are purchases of power through the SPP IM and not electric generated by the Company.

Staff has determined that Evergy Missouri Metro's total purchased power expense for
the prudence Review Period is \$** ________**, as shown previously in Table 3. More detail
for the cost of PP is shown in Table 14.

1		<u> Table 14 – Confidential</u>	
2	**		
		=	
		=	
		=	
		ΞΞ	
3		=	
5			·]

**

4 5

6

7

8

9

10

11

12

13

Evergy Missouri Metro had nine long-term purchase power agreements in effect at the start of the Review Period: Cimarron 2, Slate Creek, Spearville 3, Waverly, Osborn, Pratt, Prairie Queen, and The Central Nebraska Public Power and Irrigation District ("CNPPID"). Staff also reviews long-term purchased power contracts during a general rate case. As a result of that review, a determination is made regarding what generation plants and purchased power contracts should be input into Staff's fuel model. The outcome of the most recent general rate case is taken into consideration regarding the prudency of long-term purchased power contracts. Staff also considers the Company's Integrated Resource Plan ("IRP") and IRP Annual Updates regarding the prudency of long-term purchased power contracts.

4

5

6 7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

<u>Cimarron 2, Slate Creek, Osborn, Spearville 3, Waverly,</u> <u>Rock Creek, Prairie Queen and Pratt</u>

Evergy Missouri Metro had long-term purchased power contracts with eight wind farms during the Review Period. A further description of these contracts can be found in Sections III. N, O, P, Q, R, S, T, and U of this report. Not included in these sections of Staff's Report is the new purchased power wind contracts that Evergy Missouri Metro has recently signed into since the associated costs and revenues have not yet been sought for recovery through the FAC. However, Staff is aware of these additional purchased power wind contracts and provided as part of its Staff Report in the most recent Evergy Missouri Metro 2020 IRP Annual Update³⁹ concerns with these additional purchased power wind contracts. Given that a majority of Evergy Missouri Metro's current wind PPAs are creating more costs for ratepayers than revenues and additional purchased power wind contracts could put ratepayers at greater risk, Staff notes in its Staff Report in Case No. EO-2020-0280 "that this risk could be addressed fairly through risk mitigation or risk sharing in the Commission-approved fuel adjustment clauses of the Companies."⁴⁰

CNPPID Hydro Power Purchase Agreement

Evergy Missouri Metro has a long-term (10-year) purchase power agreement with Central Nebraska Public Power and Irrigation District ("CNPPID") ending December 31, 2023, for energy generated by several hydroelectric facilities (Jeffery Hydro 1, Jeffery Hydro 2, Johnson Hydro 11, Johnson Hydro 12, and Johnson Hydro 21) located in Nebraska. The contract is based on a fixed energy price of \$** _____ ** per MWh and ** ____ ** MW of capacity and is a "take-or pay" contract. Costs of electricity under the CNPPID purchase power agreement are \$** ______ ** for July 1, 2018 through November 30, 2018.⁴¹ CNPPID is not a Division of Energy certified renewable energy resource.

³⁹ Case No. EO-2020-0280.

⁴⁰ Case No. EO-2020-0280, Staff Report, Page 7.

⁴¹ During the last general rate case, Case No. ER-2018-0145, the Commission, in its *Order Approving Stipulations and Agreements* issued on October 31, 2018, approved an agreement that the CNPPID contract would no longer be recoverable through Evergy Missouri Metro's FAC as of December 6, 2018.

1 Non-firm Short-term Energy 2 Evergy Missouri Metro purchases hourly energy in the SPP IM. Since implementing the 3 SPP IM, SPP has controlled the economic dispatch of Evergy Missouri Metro's generation. 4 During times that Evergy Missouri Metro's load exceeds Evergy Missouri Metro's generation, 5 Evergy Missouri Metro becomes a net purchaser in the SPP market. These SPP market 6 purchases are from other electric suppliers to help meet Evergy Missouri Metro's load during 7 times of forced or planned plant outages and during times when the market price is below the 8 marginal cost of providing that energy from Evergy Missouri Metro's generating units. Under 9 the SPP IM, Evergy Missouri Metro's generation is offered to the SPP IM and energy needed 10 for native load requirements is purchased from the SPP market. "Spot purchases and sales are 11 made based upon SPP market and operating conditions for the entire SPP footprint." Costs for 12 the SPP IM purchases are included as "Non-Firm Short-term Energy" in Table 3 and Table 14 13 of this report. Further discussion of Evergy Missouri Metro's participation in these markets can 14 be found in Section III.A. of this report. 15 **Short-term Demand**

There were no capacity charges for capacity purchases less than 12 months in duration during the Review Period.

2. Summary of Cost Implication

If Evergy Missouri Metro erred when it booked costs from purchased power contracts or if Evergy Missouri Metro imprudently participated in the SPP IM, ratepayer harm could result from an increase in costs collected through the FAC.

3. Conclusion

16

17

18

19

20

21

22

23

24

25

Staff found no indication of imprudence by Evergy Missouri Metro related to its purchasing short-term capacity, booking long-term purchased power contracts, or purchasing non-firm short-term energy.

8

9

1

2

4. Documents Reviewed

- a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0001, 0002, 0019, 0020, 0023, 0043, 0045, 0046, 0053, 0058, 0067, 0068, 0069, 0070 and 0071;
- b. PPA Contracts;
- c. Staff Report in EO-2020-0280; and
- d. Section III.A. of this report.

Staff Expert/Witness: Brooke Mastrogiannis

IV. INTEREST

1. Description

10 During each accumulation period, Evergy Missouri Metro is required to calculate a 11 monthly interest amount based on Evergy Missouri Metro's short-term debt borrowing rate that 12 is applied to the under-recovered or over-recovered fuel and purchased power costs. Evergy 13 Missouri Metro's short-term debt rate is calculated using the daily one-month United States 14 Dollar London Interbank Offered Rate ("LIBOR"), using the last previous actual rate for 15 weekends and holidays or dates without an available LIBOR, and the Applicable Margin for 16 Eurodollar Advances. A simple mathematical average of all the daily rates for the month is then 17 computed. For the Review Period, Evergy Missouri Metro's average monthly interest rate from 18 July 1, 2018 through December 31, 2019 was ** ** with the total amount of interest accumulated for the period of \$** **. The interest amount is component "I" of 19 20 Evergy Missouri Metro's FAC.

21 22

23

24

25

26

27

28

2. Summary of Interest Implications

If Evergy Missouri Metro imprudently calculated the monthly interest amounts or used short-term debt borrowing rates that did not fairly represent the actual cost of Evergy Missouri Metro's short-term debt, ratepayers could be harmed by FAC charges that are too high.

3. Conclusion

Staff found no evidence Evergy Missouri Metro imprudently determined the monthly interest amount that was applied to the under-recovered or over-recovered fuel and purchased power costs.

1 4. **Documents Reviewed** a. Evergy Missouri Metro's responses to Staff Data Request Nos. 0001 and 0044; 2 b. Evergy Missouri Metro's monthly interest calculation work papers in support of the 3 interest calculation amount on the under-recovered or over-recovered balance; and 4 c. Company Files: q0001 conf Metro section 8 filing – 7th accum – dec 2018; q0001 5 conf Metro section 8 filing -8^{th} accum -jun 2019; and, q0001 conf Metro section 8 6 filing – 9th accum – dec 2019. 7 Staff Expert/Witness: Cynthia M. Tandy 8

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

)

)

)

)

In the Matter of the Third Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of Evergy Metro, Inc. d/b/a Evergy Missouri Metro

Case No. EO-2020-0263

AFFIDAVIT OF JORDAN HULL, CYNTHIA M. TANDY, LISA WILDHABER

STATE OF MISSOURI)	
)	SS.
COUNTY OF COLE)	

COME NOW Jordan Hull, Cynthia M. Tandy, Lisa Wildhaber, and on their oath declares that they are of sound mind and lawful age; that they contributed to the foregoing *Direct Report*; and that the same is true and correct according to their best knowledge and belief, under penalty of perjury.

Further the Affiants sayeth not.

<u>/s/ Jordan Hull</u> Jordan Hull

/s/ Cynthia M. Tandy Cynthia M. Tandy

<u>/s/ Lisa Wildhaber</u> Lisa Wildhaber