FILED October 21, 2024 Data Center Missouri Public Service Commission

## Exhibit No. 221

Staff – Exhibit 221 Justin Tevie Direct File No. ER-2024-0189

Exhibit No.:Issue(s):Special incremental loadWitness:Justin TevieSponsoring Party:MoPSC StaffType of Exhibit:Direct TestimonyCase No.:ER-2024-0189Date Testimony Prepared:June 27, 2024

## **MISSOURI PUBLIC SERVICE COMMISSION**

#### INDUSTRY ANALYSIS DIVISION

#### TARIFF AND RATE DESIGN DEPARTMENT

#### DIRECT TESTIMONY

OF

#### JUSTIN TEVIE

## EVERGY MISSOURI WEST, INC.,

### d/b/a Evergy Missouri West

#### CASE NO. ER-2024-0189

Jefferson City, Missouri June 27, 2024

\*\* Denotes Confidential Information \*\*

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2		DIRECT TESTIMONY
3		OF
4		JUSTIN TEVIE
5 6		EVERGY MISSOURI WEST INC, d/b/a EVERGY MISSOURI WEST
7		CASE NO. ER-2024-0189
8	Q.	Please state your name and business address.
9	А.	Justin Tevie, 200 Madison Street, Jefferson City, MO 65102.
10	Q.	By whom are you employed and in what capacity?
11	А.	I am employed by the Missouri Public Service Commission ("Commission") as
12	an Economics	Analyst for the Tariff and Rate Design Unit, of the Industry Analysis Division
13	of the Commi	ssion Staff.
14	Q.	Please describe your educational and work background.
15	А.	In 2013, I obtained a graduate degree in Economics from the University of New
16	Mexico. In 20	019, I joined the Missouri Department of Mental Health as a Research Analyst
17	assisting with	data analysis and federal reporting. Prior to that, I was a Forecast Analyst at
18	Department o	f Social and Health Services in the State of Washington assisting with forensic
19	caseload forec	casting and reporting.
20	Q.	What is the purpose of your direct testimony?
21	А.	The purpose of my testimony is to support Staff's adjustment to the revenue
22	requirement for	or Evergy Missouri West ("EMW") in relation to the Special Incremental Load
23	("SIL") agreer	ment between EMW and Nucor Steel Sedalia, LLC ("Nucor"). I will also provide
24	support for the	e Staff's update rate revenue and billing determinants for Nucor.

Q. Have you previously testified in proceedings before the Missouri Public
 Service Commission?

A. Yes, I provided testimony in File no. ER-2022-0337, File no. EO-2023-0136,
EO-2023-0369 and EO-2023-0370. The first was an Ameren Missouri general rate case, while
the rest are Evergy and Ameren Missouri Energy Efficiency Investment Act ("MEEIA") cases.

6 <u>EX</u>

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#### **EXECUTIVE SUMMARY**

Q.

Please summarize your testimony.

The SIL agreement between EMW and Nucor and the stipulations and 8 A. 9 agreement<sup>1</sup> ("2019 Agreement") stipulate that the revenues generated should be greater than or 10 equal to the cost of serving Nucor. Staff's analysis revealed that there was an under recovery of approximately \$4,909,000. The hold harmless provision in the non-unanimous 11 12 Stipulation and Agreement ensures that non-participants are not penalized for any revenue 13 shortfall from the Nucor operations. Staff recommends that the Commission reduce the revenue 14 requirement by approximately \$4,909,000 based on an imputed revenue adjustment to cover 15 the revenue deficit in accordance with the 2019 Agreement as supported by this testimony.

Staff developed a normalized set of market prices to be used as an input in the fuel-cost
model to determine which of the company's generators will run and ultimately the cost of fuel
for those generators.

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#### NUCOR/SPECIAL INCREMENTAL LOAD CONTRACT

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Q. What is Nucor?

<sup>1</sup> File No. EO-2019-0244

Nucor Corporation and its affiliates are engaged in the manufacture of steel and 1 A. steel products at over 60 facilities in the United States, including steel mills that use electric arc 2 furnaces to produce steel.<sup>2</sup> The Nucor plant in Sedalia, Missouri is its first steel rebar producing 3 mill that using an electric arc furnace to recycle scrap steel into steel rebar. 4 5 Under the 2019 Agreement, an agreement was reached to approve the SIL tariff to 6 provide service to Nucor for a term of no greater than ten years. EMW agreed to monitor and report to Staff and OPC ("Office of Public Counsel") whether the revenues received under the 7 8 SIL are sufficient to cover the incremental costs of serving Nucor load. According to the 9 stipulation, if rate revenues from Nucor's revenues fall short of specified costs, then the revenue 10 deficiency is not to be included in the rate case's revenue requirement so that other EMW 11 customers do not subsidize Nucor's costs. 12 Q. Has Nucor's load exceeded the capacity amount utilized by EMW to determine 13 the cost of serving Nucor load at any time during the update period, year ending December 14 2023? Yes, Nucor's demand exceeded the capacity amount of \*\* 15 А 16 17

Q. What are the implications of Nucor demand exceeding the available capacity?
A. EMW may have to acquire more capacity to serve Nucor's load and to meet
EMW's reserve margin requirements. Specifically, the peak demand identified in this testimony

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<sup>&</sup>lt;sup>2</sup> Page 3 of the direct testimony of Kevin Van de Ven in Case No. EO-2019-0244.

must be scaled up by the SPP 15% planning reserve margin-which would result in a new 1 capacity requirement of approximately \*\* 2 .\*\* 3 How does Nucor's load compare to other EMW customers? Q. 4 A. As of December 31, 2023 Nucor was the largest EMW customer. For the update 5 period (year ending in December 2023), Nucor's maximum hourly load was approximately 6 \*\* .\*\* Given the importance of Nucor's load to EMW, they should continuously monitor 7 8 their daily operations and needs. 9 Why is Nucor's relative load important in this case? Q. 10 А Because Nucor's load impacts EMW's purchased power costs in the Southwest 11 Power Pool ("SPP"). Imbalances can arise in the overall purchased power cost that will flow 12 through the Fuel Adjustment Clause ("FAC") because of changes in actual operational loads of 13 Nucor relative to expected loads that are not reflected in EMW's bid for load purchases from 14 SPP. EMW also entered into a purchased power agreement ("PPA") to potentially offset some 15 of its costs and partially meet its capacity needs. The wind PPA can generate positive net revenues when the generation of wind power is greater than the needs of Nucor and the 16 17 locational marginal price of energy exceeds the contracted purchase price of the PPA. 18 Generation revenues are used as an input to calculate the base factor in the FAC, alongside the 19 load and fuel costs. If power purchases to serve Nucor load are excluded or subtracted, the base 20 factor is lower, all else being equal. 21 What is the hold harmless provision included in the special incremental Q.

22 load schedule?

1	А.	The Special Rate, Provisions, and Terms section of Schedule SIL states that		
2	"Non-participating customers shall be held harmless from any deficit in revenues provided by			
3	any customer served under this tariff. <sup>3</sup> " It further states that:			
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23		The Company will make provisions to uniquely identify the costs and revenues for each respective Special Incremental Load Rate Contract within its books and records. This information will be available to support periodic reporting as ordered by the Commission. At the time of a general rate proceeding the portion of the Company's revenue requirement associated with the incremental costs net of PPA net revenues to serve the Customer shall be assigned to the Customer. The Customer's rate revenues shall be reflected in Company's net revenue requirement. If the Customer's rate revenues do not exceed the incremental cost to serve the Customer as reflected in the revenue requirement calculation, the Company shall make an additional revenue adjustment covering the shortfall to the revenue requirement calculation through the true-up period, to ensure that non-Schedule SIL customers will be held harmless from such effects from the service under Schedule SIL. In no event shall any revenue deficiency (that is, a greater amount of the Customer's incremental costs compared to the Customer's revenues) be reflected in the Company's cost of service in each general rate proceeding for the duration of service to the Customer(s) during the terms of the contract between Company and Customer served under this tariff.		
24	Q.	Does the 2019 Agreement contain the hold-harmless provision?		
25	А.	Yes, this is stated in paragraph 8, entitled "Rate making Treatment."		
26	Q.	How does the cost of serving Nucor compare to the revenues it generated during		
27	the update pe	eriod (year ending December 2023)?		
28	А	During the said period, the total cost to serve Nucor was approximately		
29	**			
30		** ·		
31	Q.	What is Exhibit 1?		

<sup>&</sup>lt;sup>3</sup> Schedule SIL - P.S.C. MO. No. 1 Original Sheet No. 157.2

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	financial performance of Nucor and its format is set forth in the non-unanimous stipulation
3	and agreement.
4	Q. Explain why Exhibit 1 is important within the context of the SIL contract.
5	A Because it provides a high-level summary of the rate revenue and costs to serve
6	Nucor as of a particular date.
7	Q. What are the main components of Exhibit 1?
8	A The main components are Rate Base, Net Cost of Service, and Overall Cost
9	of Capital.
10	Q. How did Staff calculate the revenue deficiency associated with Schedule SIL.
11	A Staff relied upon information provided by Evergy in accordance with Exhibit 1
12	on December 31, 2023, updated for known values in the following cost and revenue categories:
13	event balancing, purchased power, current month rate of return, and net capacity costs. The
14	updated Exhibit 1 reveals that the total cost of serving Nucor was greater than the revenues
15	generated resulting in a deficiency of approximately <b>** ••••• ••••</b> This Exhibit is
16	distinct from the one provided by EMW in that it contains adjustments based on Staff
17	direct position.
18	Q. How does Staff recommend the revenue deficiency be resolved by the
19	Commission in this case?
20	A. Staff recommends that the Commission reduce the revenue requirement by
	approximately \$4,000,000 based on an imputed revenue adjustment to sever the revenue deficit.
21	approximately \$4,909,000 based on an imputed revenue adjustment to cover the revenue deficit
16 17 18 19	<ul> <li>distinct from the one provided by EMW in that it contains adjustments based on St direct position.</li> <li>Q. How does Staff recommend the revenue deficiency be resolved by a Commission in this case?</li> <li>A. Staff recommends that the Commission reduce the revenue requirement</li> </ul>

<sup>&</sup>lt;sup>4</sup> See Schedule JT.1 attached to this testimony.

1 MARKET PRICES

Q.

Q.

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What are market prices?

A. The market price represents the dollar-per-megawatt-hour amount paid for
electric energy in the SPP market in any given hour.

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Why did Staff review market prices in the context of this case?

A. The market price serves as a key input in the fuel-cost model. For each hour, the
fuel model is programmed to economically dispatch each unit based on inputs provided.
The market price therefore sets the marginal generator, determines which of the Company's
generators will run, and eventually the cost of the fuel for those generators.

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Q. How did Staff develop the market prices utilized in the Staff's fuel model?

Staff developed a normalized set of prices by looking at the three years of data 11 A. ending in December 2023<sup>5</sup> for all nodes included in the fuel model. The first step in the 12 13 normalization of the market prices was to calculate the three-year average of the nodal market 14 prices for each hour in the year and sort these in ascending order. The rationale was to capture 15 the general distribution/representation of the raw data. A further step was performed to adjust for an anomaly, whose source was unknown, which occurred on Sunday, Nov 5, 2023. 16 The market prices that prevailed on that day were abnormal<sup>6</sup> so Staff replaced the values for 17 18 that day with a simple average of the prices on October 29, 2023 and Nov 12, 2023, both of which fell on a Sunday.<sup>7</sup> The next step was ranking the actual hourly prices for the update 19

<sup>&</sup>lt;sup>5</sup> Staff replaced the hourly prices for the month of February 2021 with February 2020 prices due to the high market prices experienced during 2021 because of Winter Storm Uri.

<sup>&</sup>lt;sup>6</sup> Unusual for that time of the year since it could not be explained by any unusual weather events.

<sup>&</sup>lt;sup>7</sup> October 29, 2023 was the Sunday prior to November 5, 2023 and November 12, 2023 was the Sunday after November 5, 2023.

- 1 period using the RANK function in Excel. The final step was matching the ranks of the three-
- 2 year average price to those of the raw data in the update period so that their variation is similar.
  - Q. Does this conclude your direct testimony?
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A. Yes, it does.

#### BEFORE THE PUBLIC SERVICE COMMISSION

#### **OF THE STATE OF MISSOURI**

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In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Request for Authority to Implement A General Rate Increase for Electric Service

Case No. ER-2024-0189

#### **AFFIDAVIT OF JUSTIN TEVIE**

STATE OF MISSOURI	)	
	)	SS.
COUNTY OF COLE	)	

**COMES NOW JUSTIN TEVIE** and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Direct Testimony of Justin Tevie*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

JUSTIN TEVIE

#### JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this  $26 \frac{1}{2}$  day of June 2024.

D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: April 04, 2025 Commission Number: 12412070

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Notary Public (

## CREDENTIALS AND CASE PARTICIPATION OF JUSTIN TEVIE

### **Present Position:**

I am an Economics Analyst in the Tariff/Rate Design Department, Industry Analysis Division, of the Missouri Public Service Commission.

### **Educational Background and Work Experience:**

In 2013, I obtained a graduate degree in Economics from the University of New Mexico. In 2019, I joined the Missouri Department of Mental Health as a Research Analyst assisting with data analysis and federal reporting. Prior to that, I was a Forecast Analyst at Department of Social and Health Services in the State of Washington assisting with forensic caseload forecasting and reporting.

Case No.	Company	Testimony	Issue
ER-2022-0337	Ameren Missouri	Direct	Market prices
		Rebuttal	_
EO-2023-0136	Ameren Missouri	Direct	Savings shapes, program evaluation,
		Rebuttal	EM & V, Principal-
		Surrebuttal	<ul> <li>Agent problem, and employment</li> </ul>
ER-2023-0184	Evergy Missouri West	Staff Recommendation	MEEIA Cycle 3
ER-2023-0411	Evergy Missouri West	Staff Recommendation	MEEIA Cycle 3
ER-2024-0186	Evergy Missouri West	Staff Recommendation	MEEIA Cycle 3
ER-2024-0184	Evergy Missouri Metro	Staff Recommendation	MEEIA Cycle 3
ER-2023-0369	Evergy Missouri West	Direct	MEEIA Cycle 4

ER-2023-0370	Evergy Missouri	Direct	MEEIA Cycle 4
	Metro		

Case No. ER-2024-0189 Schedule JT-d1 Page 2 of 2

# SCHEDULE JT-d2

# HAS BEEN DEEMED

# CONFIDENTIAL

# IN ITS ENTIRETY