

*Exhibit No.:*  
*Issue(s):* *Production Cost Model*  
*Witness:* *Shawn E. Lange*  
*Sponsoring Party:* *MoPSC Staff*  
*Type of Exhibit:* *Rebuttal Testimony*  
*Case No.:* *ER-2019-0335*  
*Date Testimony Prepared:* *January 21, 2020*

**MISSOURI PUBLIC SERVICE COMMISSION**

**INDUSTRY ANALYSIS DIVISION**

**ENGINEERING ANALYSIS DEPARTMENT**

**REBUTTAL TESTIMONY**

**OF**

**SHAWN E. LANGE**

**UNION ELECTRIC COMPANY,  
d/b/a AMEREN MISSOURI**

**CASE NO. ER-2019-0335**

*Jefferson City, Missouri*  
*January 2020*



1 Q. What is Staff's position on Ameren Missouri's retention policy as it pertains to  
2 Unit Commitment analysis?

3 A. Staff is in favor of the Sierra Club's recommendation<sup>1</sup> to require Ameren  
4 Missouri to retain the analyses underlying its unit commitment decisions for a period of at least  
5 two years.

6 Q. What is the second point Staff would like to address?

7 A. Starting on pg. 26 and continuing through pg. 42, Sierra Club witness Avi  
8 Allison discusses Ameren Missouri's unit commitment and dispatch practices. Much of that  
9 discussion focuses on the practice of utilizing "must-run" commitment status for its units, in  
10 particular coal units.

11 Q. What is Staff's position on "must-run" commitment status?

12 A. In File No. EW-2019-0370, Staff was tasked with investigating the self-commit  
13 and self-scheduling practices of Missouri's investor owned electric utilities in their respective  
14 Regional Transmission Organization ("RTO") energy markets to determine if such practices  
15 benefit their ratepayers. Staff's resulting investigatory report on Ameren Missouri can be found  
16 in the EW-2020-0032 case docket.

17 Q. Have any of the RTOs/ISOs looked at the effect "must-run" or "self-commit"  
18 commitment status has on the respective market?

19 A. Yes. In December 2019, the Southwest Power Pool ("SPP") Market Monitoring  
20 Unit published a report entitled "Self-Committing in SPP markets: Overview, impacts, and  
21 recommendations."

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<sup>1</sup>Avi Allison Direct filed December 4, 2019 page 5, lines 6-8.

1 Q. What impact did eliminating self-committing have in SPP markets?

2 A. “On average in every hour of the study period, system marginal prices were  
3 higher when all units market-committed... The average system marginal price over all hours  
4 increased more than seven percent, about \$2/MWh on average.”<sup>2</sup>

5 Q. What was their recommendation(s)?

6 A. “[S]imply eliminating self-commitment without any additional changes could  
7 result in an increase in total production costs. This would not necessarily be an improvement  
8 when compared to today’s results. However, when lead times were shortened to reflect an  
9 additional day in the market optimization and self-commitment was eliminated, producers were  
10 paid more and production costs declined.”<sup>3</sup> “Specifically, we recommend that SPP and its  
11 stakeholders consider a multi-day commitment period of two days to allow units to commit  
12 long lead time resources.”<sup>4</sup>

13 Q. In your opinion, are the conclusions of the SPP Market Monitoring Unit  
14 generally applicable to Ameren Missouri’s participation within Midcontinent Independent  
15 System Operator (“MISO”)?

16 A. “MISO analyses show that multi-day market forecasts can improve economic  
17 commitment decisions.”<sup>5</sup> However, the mix of generation resources, load, and the geographic  
18 location of generation and transmission assets is different between MISO and SPP. In addition,  
19 MISO has a capacity market, and SPP does not. These differences make the extent of the exact  
20 effect that the SPP MMU recommendation would have in MISO unclear.

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<sup>2</sup> <https://www.spp.org/documents/61118/spp%20mmu%20self-commit%20whitepaper.pdf> pg. 39.

<sup>3</sup> <https://www.spp.org/documents/61118/spp%20mmu%20self-commit%20whitepaper.pdf> pg. 42.

<sup>4</sup> <https://www.spp.org/documents/61118/spp%20mmu%20self-commit%20whitepaper.pdf> pg. 43.

<sup>5</sup> [https://www.ferc.gov/CalendarFiles/20180626080726-T2%20-%202%20-%20Hansen%20-%20MISO\\_PowerGEM\\_MultiDay\\_FINAL.pdf](https://www.ferc.gov/CalendarFiles/20180626080726-T2%20-%202%20-%20Hansen%20-%20MISO_PowerGEM_MultiDay_FINAL.pdf) pg. 2.

1 Q. Has Staff committed to continue to monitor the situation?

2 A. Yes, in Staff's Second Supplemental Report submitted November 8, 2019,  
3 "Staff maintain[ed] that in order to fully understand the economic impact of self-scheduling on  
4 a given unit's profitability, an analysis at the RTO level would need to be conducted." Further  
5 noting, "Due to the highly confidential nature of utilities' market bidding strategies, it is highly  
6 unlikely that any party other than SPP or MISO have the raw data, modeling software access,  
7 and resources to conduct such an extensive analysis of market trends." Having noted the  
8 constraints, Staff indicated its plans to monitor Ameren Missouri's self-commit and  
9 self-scheduling strategies in fuel adjustment clause prudence reviews. Further, when discussing  
10 special contemporary issues for each utility's integrated resource planning, the Commission  
11 included self-scheduling/self-commit as a special contemporary issue that should be addressed  
12 in IRPs.

13 Q. Does this conclude your rebuttal testimony?

14 A. Yes, it does.

**BEFORE THE PUBLIC SERVICE COMMISSION**

**OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company            )  
d/b/a Ameren Missouri's Tariffs to Decrease        )  
Its Revenues for Electric Service                    )            Case No. ER-2019-0335

**AFFIDAVIT OF SHAWN E. LANGE**

STATE OF MISSOURI        )  
  )            ss.  
COUNTY OF COLE        )

**COMES NOW SHAWN E. LANGE** and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Rebuttal Testimony of Shawn E. Lange*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

*Shawn E. Lange*  
\_\_\_\_\_  
SHAWN E. LANGE

**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 16<sup>th</sup> day of January, 2020.

*Dianna L. Vaught*  
\_\_\_\_\_  
Notary Public

DIANNA L. VAUGHT  
Notary Public - Notary Seal  
State of Missouri  
Commissioned for Cole County  
My Commission Expires: July 18, 2023  
Commission Number: 15207377