

Exhibit No.: CTG In-Service
Issue(s): Shawn E. Lange
Witness: MoPSC Staff
Sponsoring Party: Surrebuttal Testimony
Type of Exhibit: EA-2025-0238
Case No.: January 16, 2026
Date Testimony Prepared:

MISSOURI PUBLIC SERVICE COMMISSION
INDUSTRY ANALYSIS DIVISION
ENGINEERING ANALYSIS DEPARTMENT

SURREBUTTAL TESTIMONY OF
OF
SHAWN E. LANGE

**UNION ELECTRIC COMPANY,
d/b/a Ameren Missouri**

CASE NO. EA-2025-0238

*Jefferson City, Missouri
January 2026*

SURREBUTTAL TESTIMONY

OF

SHAWN E. LANGE

**UNION ELECTRIC COMPANY,
d/b/a Ameren Missouri**

CASE NO. EA-2025-0238

Q. Please state your name and business address.

A. My name is Shawn E. Lange. My business address is 200 Madison Street, on City, Missouri 65101.

Q. Are you the same Shawn E. Lange that contributed to Staff's Rebuttal Report
on December 12, 2025?

A. Yes.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to present the combustion turbine operator (“CTG”) in-service criteria that Staff and Ameren Missouri have agreed upon for the follow CTG Project (“CTG Project”).

EXECUTIVE SUMMARY

Q. What are in-service criteria?

A. In-service criteria is a set of predetermined criteria that can be used to evaluate unit and determine whether it is “fully operational and used for service.”¹

Q. Can you provide an update on the status of recommended in-service criteria for 'G Project?

¹ Section 393.135, RSMo. 2000.

Surrebuttal Testimony
of Shawn E. Lange

1 A. Yes. Since the filing of Staff's Rebuttal Report on December 12, 2025,
2 Ameren Missouri and Staff have engaged in discussions concerning Staff's recommended
3 in-service criteria for the CTG Project. At this time, Staff understands that Ameren Missouri
4 concurs with Staff's recommended in-service criteria for the CTG Project.

5 Q. Do other Staff witnesses address the status of in-service criteria for other aspects
6 of the CCN?

7 A. Yes, Staff witness Arandia addresses the status of the Selective Catalytic
8 Reduction ("SCR") aspect of the CTG Project.

9 **CONCLUSION**

10 Q. What are your recommendations for the CTG in-service criteria?

11 A. Staff recommends the Commission order the adoption of the attached CTG
12 in-service criteria (Schedule SEL-s1) to be used to evaluate the Big Hollow CTG Project.

13 Q. Does this conclude your surrebuttal testimony?

14 A. Yes it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

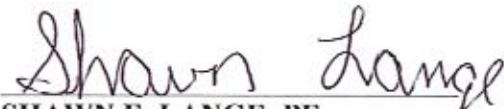
In the Matter of the Application of Union)
Electric Company d/b/a Ameren Missouri for)
Permission and Approval and Certificates of) Case No. EA-2025-0238
Public Convenience and Necessity Authorizing)
it to Construct a New Generation Facility and)
Battery Energy Storage System)

AFFIDAVIT OF SHAWN E. LANGE, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

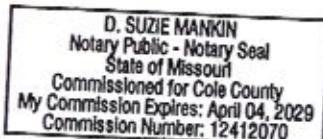
COMES NOW SHAWN E. LANGE, PE, and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Surrebuttal Testimony of Shawn E. Lange, PE*; and that the same is true and correct according to his best knowledge and belief.

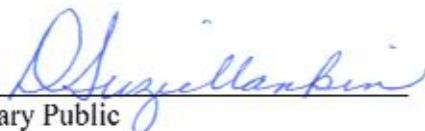
Further the Affiant sayeth not.


SHAWN E. LANGE, PE

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 15th day of January 2026.




Suzie Mankin
Notary Public

Combustion Turbine Unit In-Service Test Criteria
(Nameplate Capacity of \geq 95 MW)

1. All major construction work is complete.
2. All preoperational tests have been successfully completed.
3. Unit successfully meets all contract operational guarantees.
4. Unit successfully demonstrates its ability to initiate the proper start sequence resulting in the unit operating from zero (0) rpm (or turning gear) to full load when prompted at a location (or locations) from which it is normally operated.
5. If unit has fast start capability, the unit demonstrates its ability to meet the fast start capability.
6. Unit successfully demonstrates its ability to initiate the proper shutdown sequence from full load resulting in zero (0) rpm (or turning gear) when prompted at a location (or locations) from which it is normally operated.
7. Unit successfully demonstrates its ability to operate at minimum load for one (1) hour.
8. Unit successfully demonstrates its ability to operate at or above 95% of nominal capacity for four (4) continuous hours.
9. Unit successfully demonstrates its ability to produce an amount of energy (MWh) within a 72-hour period that results in a capacity factor of at least 50% during the period when calculated by the formula: capacity factor = (MWh generated in 72 hours) / (nominal capacity x 72 hours).
10. Sufficient transmission interconnection facilities shall exist for the total plant design net electrical capacity at the time the unit is declared fully operational and used for service.
11. Sufficient transmission facilities shall exist for the total plant design net electrical capacity from the generating station into the utility service territory at the time the unit is declared fully operational and used for service.
12. If unit has dual fuel capability, the unit successfully demonstrates its ability to start on the back up/secondary fuel as described in Item No. 4.
13. If unit has dual fuel capability, the unit successfully demonstrates its ability to transfer between the two fuels while online.