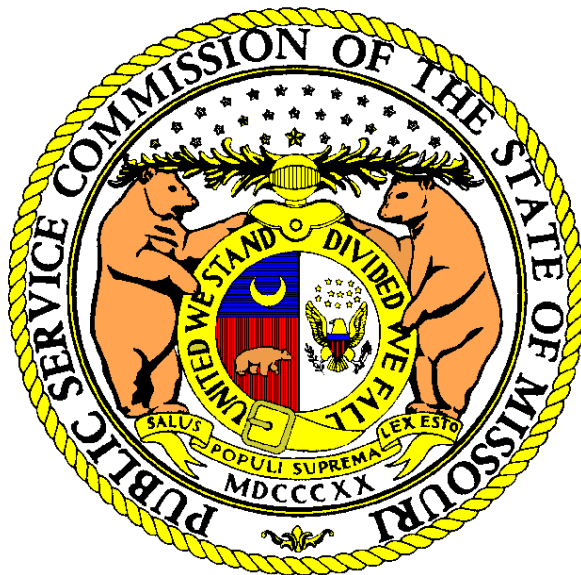


MISSOURI PUBLIC SERVICE COMMISSION

STAFF

RECOMMENDATION



AMEREN MISSOURI

CASE NO. EA-2025-0028

Jefferson City, Missouri
March 20, 2025

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STAFF RECOMMENDATION

AMEREN MISSOURI

CASE NO. EA-2025-0028

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STAFF RECOMMENDATION

AMEREN MISSOURI

CASE NO. EA-2025-0028

I. Executive Summary

On October 18, 2024, Union Electric Company, d/b/a Ameren Missouri (“Ameren Missouri”) filed an Application for a Certificate of Convenience and Necessity (“CCN”) in accordance with Section 393.170.1 RSMo, 20 CSR 4240-2.060, and 20 CSR 4240-20.045 (“Application”) with the Missouri Public Service Commission. Two Motions to Intervene were later filed on behalf four homeowners and Renew Missouri pursuant to 20 CSR 4240-2.075(3), which were granted on November 19, 2024.

On February 12, 2025, Ameren Missouri filed a Motion for Leave to file an Amended CCN Application. That same day Ameren Missouri filed an Amended CCN Application with the Commission. The Amended Application requests permission for Ameren Missouri to construct, install, own, operate, maintain, and otherwise control a new 161 kV substation along with ancillary connecting transmission lines to be located in Cooper County, Missouri (“Cooper Project” or “Project”). The Application also requests permission for Ameren Missouri to “reconfigure an existing 69 kV transmission substation located in Cooper County, Missouri.”

Staff has reviewed the Amended Application concerning the Cooper County Substation based on the five factors the Commission listed in *In Re Tartan Energy*, GA-94-127, 3 Mo.P.S.C.3d 173, 177 (1994) (“Tartan Criteria”):

- Need;
- Qualifications to own, operate, control and manage the facilities, and provide the service;
- Financial ability;
- Economic feasibility; and
- Promotion of the public interest.

1 In summary, based on Staff's review: 1) the Project is needed; 2) Ameren Missouri is
2 qualified to construct, install, own, operate, maintain, and otherwise control and manage the
3 Project; 3) Ameren Missouri has the financial ability to undertake the Project; 4) the Project is
4 likely to be economically feasible; and 5) the Project is in the public interest with the conditions
5 recommended by Staff.

6 As discussed below, Staff recommends the Commission order the issuance of a CCN for
7 Ameren Missouri to construct, own, operate, and maintain a new 161 kV substation along with
8 ancillary connecting transmission lines to be located in Cooper County, Missouri; and reconfigure
9 an existing 69 kV transmission substation located in Cooper County, Missouri. Additionally, Staff
10 recommends the Commission order a number of conditions as presented at the end of this report.

11 **II. Application Summary**

12 Ameren Missouri currently owns and operates a 161 kV / 69 kV transmission substation in
13 Overton, Missouri (the "Overton 161kV / 69kV Substation"). This substation supports several bulk
14 stations and transmission interconnections. It is anticipated that there will be future generation
15 interconnection requests in this area in the near- to intermediate-term.¹

16 The Overton 161kV / 69kV Substation is currently a 9-position straight bus (one bus
17 with four positions and another bus with five positions), and Ameren Missouri expects to
18 use another terminal position in this area. The Overton Substation will still have equipment
19 to transform voltage from 161kV to 69kV, and it will also have a recently-installed 67 MVAR
20 (Mega Volt-Ampere Reactive) capacitor bank, which operates at 161kV. A new terminal is needed
21 to accommodate an additional 345 kV / 161 kV transformer that will be added to the nearby

¹ Amended Application, page 2, paragraph 6.

1 Overton 345 kV substation. The Overton 161kV / 69kV Substation also contains 69 kV equipment.
2 The Overton 161kV / 69kV Substation has experienced five bus trips during the previous 18 years,
3 averaging one bus trip for every 2.6 years.²

4 Ameren Missouri's project includes plans to remove the 161 kV equipment from the
5 Overton 161kV / 69kV Substation and construct, in its place, a new 9-position, 161 kV substation
6 with a breaker-and-a-half configuration, to be located nearby in Cooper County (the "Cooper
7 Substation"). The proposed Cooper Substation would be constructed as an alternative to
8 expanding the existing Overton 161kV / 69kV Substation to a 10-position straight bus. This new
9 substation will be expandable to accommodate three additional future terminal positions should
10 they be required.³

11 The proposed Cooper Substation will necessitate relocating existing transmission lines,
12 including moving certain line connections from the existing Overton 161kV / 69kV Substation to
13 the proposed Cooper Substation, and building new transmission lines as necessary to connect the
14 proposed Cooper Substation to the transmission grid.⁴

15 Additionally, Ameren Missouri will make certain changes to the existing Overton 161kV
16 / 69kV Substation (which will become a 69 kV substation), including among other things,
17 reconfiguring the 69 kV equipment and installing new circuit breakers and breaker disconnect
18 switches as well as modifications to system relaying.⁵

² Amended Application, page 3, paragraph 8.

³ Amended Application, page 3, paragraph 9.

⁴ Amended Application, page 4, paragraph 10.

⁵ Amended Application, page 4, paragraph 11.

Ameren Missouri has included, within its Amended Application, the minimum filing requirements of Commission Rules 20 CSR 4240-2.060 and 20 CSR 4240-20.045. Attachment A includes the filing requirements and Staff's review.

Staff further recommends a number of conditions which are outlined in the conclusion.
Staff Witnesses: Shawn E. Lange, PE and Donald A. Fontana, PE

III. Five Tartan Criteria

Whether there is a need for the facilities and service

In evaluating whether a project is needed under the Tartan factors, Staff considers the following questions:

(a) Is the project both important to the public convenience and desirable for the public welfare?

Or

(b) Is the project effectively a necessity because the lack of the service is such an inconvenience?

Ameren Missouri plans to remove the 161 kV equipment from the existing Overton 161kV / 69kV Substation and construct the "Cooper Substation."⁶

The Overton 161kV substation is an existing substation in Cooper County Missouri, supporting a number of bulk stations and transmission interconnects. According to Ameren Missouri, inspection results show lack of fence grounding. Ameren Missouri represents that

⁶ EA-2025-0028 Application Paragraph 9.

1 there are also foundation issues and the station has a number of cap and pin insulators⁷ that need
2 to be replaced.⁸

3 Ameren Missouri reports the following outage constraints impact its ability to perform
4 work at the existing Overton 161kV station:⁹

- 5 • Due to the large west-to-east flows and lack of major 345/161kV sources in the area,
6 the Overton 345/161kV transformer can be difficult to take out of service. Thus, it is
7 difficult to get Overton 161kV bus-1 outage which can impact the Mid-Continent
8 Independent System Operator, Inc. (“MISO”) markets.
- 9 • An unplanned 161kV bus outage during outage season could result in post contingent
10 low-voltage and/or overloads for the next element trip. Studies show that with either
11 161kV bus-1 or bus-2 out of service, nearby 161kV lines cannot be taken out of service
12 without risk of post contingent low voltage or thermal overloads.
- 13 • The addition of future line positions to the straight bus, or adding buses to the 161kV
14 yard will increase the need for 161kV bus outages. Historically, Overton 161kV bus
15 has had 21 outages since 2017, averaging three bus outages per year.
- 16 • A 161kV bus outage puts Distribution at N-1 (loss of the second 161/69kV transformer)
17 from dropping load.
- 18 • Adding more positions to the 161kV straight bus will result in additional 161kV bus
19 outages to tie in primary conductor and differential protection.

⁷ In transmission and distribution lines, the overhead conductors are supported with the help of insulators avoiding a connection between the conductor and the ground. In cap and pin insulators, there is a porcelain or glass insulators (typically disc shaped) between a metallic cap and a metallic pin. This type of insulator can be stacked for higher voltage applications.

⁸ EA-2025-0028 Ameren Missouri Response to Staff DR No. 0015.

⁹ EA-2025-0028 Ameren Missouri Response to Staff DR No. 0015.

- Both 69kV buses cannot be taken out due to lack of networking ability on the distribution side.

As referred above, there are also interconnection requests at MISO and Southwest Power Pool (“SPP”) that would require interconnection at or near the Overton 161kV station.

Current active MISO Generation interconnection requests at or near Overton include the following:¹⁰

Project #	Request Status	Transmission Owner	County	State	POI Name	Summer MW	Winter MW	Fuel
J2043	Active	AMEREN ILLINOIS	Callaway	MO	Overton - McCredie 345kV	300	300	Solar
J2052	Active	AMEREN MISSOURI	Callaway	MO	Overton - McCredie 345kV	0	0	Battery Storage
J2205	Active	AMEREN MISSOURI	Callaway	MO	J1145 New 345kV POI Substation (Ameren Overton-Montgomery 345kV Line)	300	300	Hybrid
J3350	Active	AMEREN MISSOURI	Randolph	MO	5MOBERLY - SOVERTON 161.0kV	200	200	Solar

Current SPP Generation interconnection requests at or near Overton¹¹ include the following:

General	Nearest	State	Capacity	Generation Type	Fuel Type	Substation or Line
GEN-2022	Cooper	MO	80	Hybrid	Solar/Storage	Overton - Sedalia East 161 kV Substation

In addition to the listed generation interconnection requests at MISO and SPP, there is also the Grain Belt Express LLC project that will require one of the terminal positions of the proposed Cooper facility.¹²

Staff notes that there are other projects that purport to help with existing issues at Overton. The MISO Long Range Transmission Plan (“LRTP”) projects in Missouri help with N-1 and N-1-1 transmission loading contingencies in or around Overton, as shown below.¹³

¹⁰ https://www.misoenergy.org/planning/resource-utilization/GI_Queue/gi-interactive-queue/ queried January 3, 2025.

¹¹ <https://opsportal.spp.org/Studies/GIActive>, queried January 3, 2025.

¹² EA-2025-0028 Application Paragraph 15.

¹³ EA-2025-0087 Donner Direct Exhibit JD-2 Page 45.

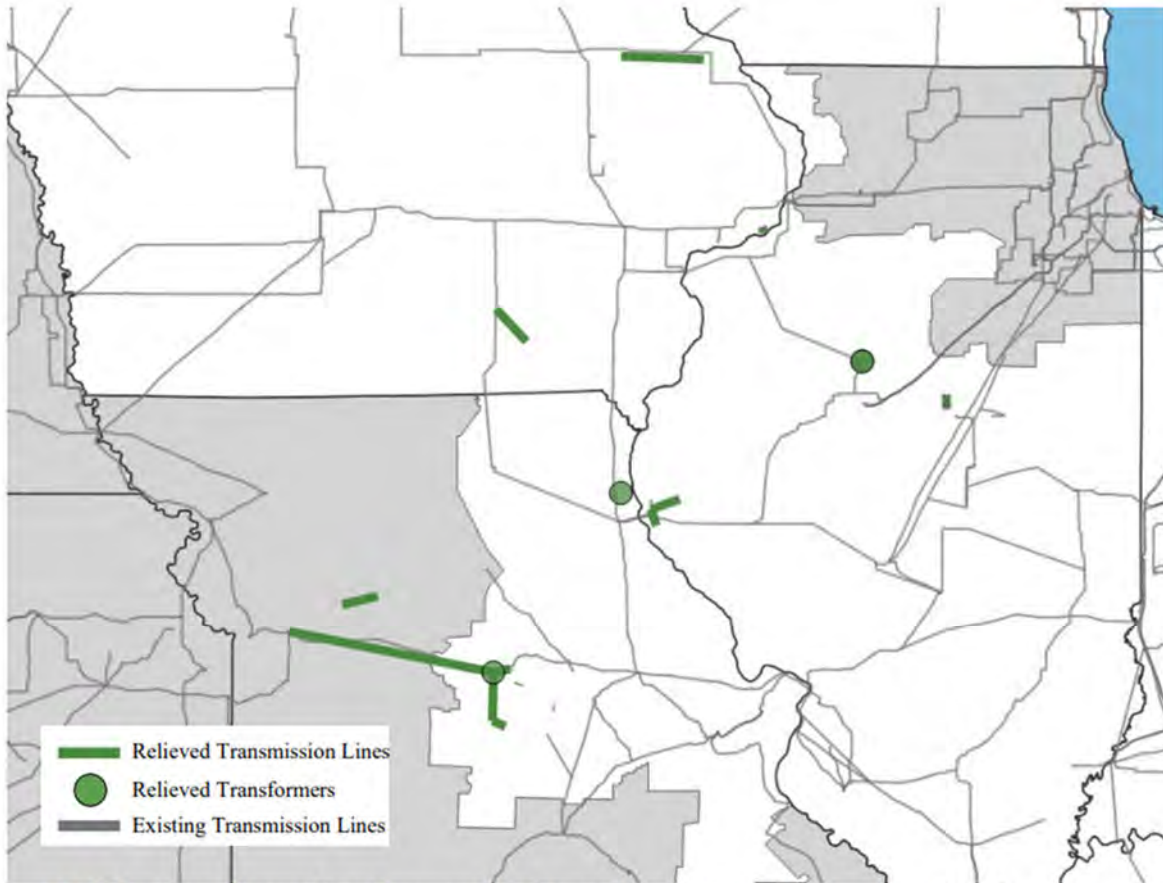


Figure 6-18: Northern Missouri Corridor map of facilities relieved in Future 1 power flow cases, for either N-1 or N-1-1 overloads. Transformers in green circles, and lines in green lines.

Monitored Facility	Area	% Loading	
		Base + West L RTP*	+ IA to MI Project + MO Projects
Marblehead 161/138 kV Transformer	AMIL	137	85
Fargo 345/138 kV Transformer 1	AMIL	122	98
Fargo 345/138 kV Transformer 2	AMIL	122	98
Herleman 3 - Quincy S. 138 kV Ckt. 73	AMIL	120	79
Herleman 1 - Quincy N. 138 kV Ckt. 50	AMIL	120	79
Diamond Start Tap - White Oak Wind Bus 138kV Ckt. 1	AMIL	114	100
Overton 345/161 kV Transformer	AMMO	109	97
Overton - Sibley 345 kV Ckt. 1	AMMO	102	88
Huntsdale - Overton 1 161 kV Ckt. 1	AMMO	101	91
California 161 kV Bus 1 - Overton 2 161 kV Ckt. 1	AMMO	98	88
Huntsdale - Perche Creek 161 kV Ckt. 1	CWLD	97	87
McBaine Bus #2 - McBaine Tap 161 kV Ckt. 1	AMMO	97	85

While the LRTP projects help with N-1 and/or N-1-1 contingencies, other issues at Overton still exist. Based on this information, Ameren Missouri shows the need for the proposed project.

Capacitor Bank:

The initial Ameren Missouri Application states: “One of the new terminal positions will accommodate a new capacitor bank that is needed for system reinforcement upon the retirement of the Rush Island plant.”¹⁴

Staff is aware of a capacitor bank that was needed as part of the results of the study performed by MISO to evaluate needs of the grid due to the retirement of Rush Island.¹⁵ The capacitor bank that Staff was aware of was installed in 2024. As a result, Staff inquired about the meaning of the new capacitor bank.

In response to Staff Data Request (DR) No. 0017, Ameren Missouri stated:

The 67 MVAR capacitor bank is already installed at the Overton 161 kV substation to ensure voltage support upon the Rush Island plant’s retirement, as called for by the Attachment Y retirement study from MISO.

As an update to the CCN application at paragraph 7, the capacitor bank referenced in that paragraph was actually added as a 9th position to Overton 161kV / 69kV Substation on March 1, 2024.

The Ameren Missouri Amended Application also states:

The Overton Substation will still have equipment to transform voltage from 161kV to 69kV and it will also have a recently-installed 67 MVAR capacitor bank, which operates at 161kV.¹⁶

¹⁴ EA-2025-0028 Application Paragraph 7.

¹⁵ MISO’s retirement process, referred to as Attachment Y, requires a study be performed to determine whether all or a portion of the resource proposed to be retired is necessary to maintain system reliability.

¹⁶ EA-2025-0028 Revised Application footnote 2.

1 Out of an abundance of caution, Staff recommends the following condition to any CCN
2 approved by the Commission for the proposed project:

- 3 • Any approval of this CCN does not include the approval for a new Capacitor Bank
4 referenced in paragraph 7 of the initial Application.

5 In conclusion, Staff recommends the Commission find that the projects are effectively a
6 necessity because the lack of the service is such an inconvenience.

7 *Staff Witness: Shawn E. Lange, PE*

8 **Whether the applicant is qualified to construct, install, own, operate, maintain,**
9 **and otherwise control and manage the Project**

10 Ameren Missouri was initially formed through a merger of Union Electric Company and
11 Central Illinois Public Service Company, and has effectively been in operation in Missouri for
12 over 120 years. Ameren Missouri currently serves approximately 1.2 million customers, including
13 St. Louis, and eastern and central Missouri.

14 Ameren Missouri has extensive resources including in-house engineering, in-house
15 construction, in-house bidding and project management, and ample financial resources. For the
16 proposed construction of the new facilities, Ameren Missouri intends to use a competitive
17 bidding process.

18 Ameren Missouri owns and operates a 2,970-mile transmission system that operates
19 at voltages from 345 kV to 138 kV.¹⁷ Considering all of the generation, transmission, and
20 distribution infrastructure Ameren Missouri owns and operates, Staff concludes Ameren Missouri
21 is qualified to provide the service.

22 *Staff Witness: Donald A. Fontana, PE*

¹⁷ Ameren Missouri 2020 IRP Chapter 7 page 2.

Whether the applicant has the financial ability for the undertaking

Staff presents evidence and provides a recommendation regarding the financial ability of Ameren Missouri to construct, install, own, operate, maintain, and otherwise control a transmission substation along with ancillary connecting transmission lines to be located in Cooper County, Missouri (the “Cooper Projects” or the “Project”). The Cooper Project is a new 161kV / 69kV substation, along with ancillary connecting transmission lines and certain modifications to an existing Overton 161 kV / 69 kV transmission substation.¹⁸

With Allowance for Funds Used During Construction (“AFUDC”) and overheads, the estimated total cost for the Project is estimated to be \$50 million.¹⁹ Ameren Missouri intends to finance the Cooper Projects based on a permanent financing structure that aligns with the long-term debt and common equity proportions consistent with Ameren Missouri's capital structure for ratemaking purposes.²⁰ In its most recent rate case, Ameren Missouri proposed a ratemaking capital structure consisting of 51.96% common equity, 0.54% preferred stock and 47.50% long-term debt at December 31, 2024.²¹ The long-term debt cost is assumed to be the current projected rate of 5.60% for a 30-year first mortgage bond financing.²²

In its Amended Application, Ameren Missouri states,

Ameren Missouri has the financial ability to own, operate, and maintain the New Facilities, which are estimated to cost approximately \$50 million, which is a small fraction of both a) Ameren Missouri's existing rate base of over \$11 billion, and b) Ameren Missouri's planned capital additions over the next five years, which also exceed \$11 billion. Moreover, the Company has sufficient access to capital markets based on, among other things, its stable credit ratings of Baa1 and BBB+, per Moody's and Standard & Poor's credit rating agencies, respectively.²³

¹⁸ Paragraphs 9 through 14, The Amended Application.

¹⁹ Paragraph 15, The Amended Application.

²⁰ Staff DR No. 0001.

²¹ Staff DR No. 0107, Case No. ER-2024-0319.

²² Staff DR No. 0001.

²³ Paragraph 17.c, The Amended Application.

1 With consideration of Ameren Missouri's financial capacity, the Applicant has the
2 financial ability to provide the service. Ameren Missouri projects an average of \$2.7 billion in
3 capital expenditures per year from 2024 through 2028.²⁴ Ameren Missouri is a wholly owned
4 subsidiary of Ameren Corporation ("Ameren Corp."). Ameren Missouri currently has access of
5 up to \$1 billion of committed credit via its \$1.4 billion Missouri credit facility that it shares with
6 its parent, Ameren Corp.²⁵ Over the next five years, S&P expects Ameren Corp.'s elevated capital
7 spending to reflect roughly \$19.7 billion in capital spending across its electric transmission and
8 electric and gas distribution businesses.²⁶ Overall, S&P expects Ameren Missouri's capital
9 spending will account for about 60% of its parent, Ameren Corp.'s, 2024-2028 capital
10 spending plan.²⁷

11 S&P and Moody's rated both Ameren Missouri and Ameren Corp. as investment grade.
12 S&P rated both Ameren Missouri and Ameren Corp. as "BBB+", while Moody's rated them as
13 "Baa1."²⁸ The expected total project cost is less than 2% of Ameren Missouri's 5-year average
14 annual capital expenditures.²⁹ In addition, Staff found no material change in Ameren Missouri's
15 financial risk profile due to the Cooper Project upon investigating the financial impact of the
16 Cooper Project.³⁰ Considering the proposed cost and financial impact of the Cooper Project, it is
17 reasonable to conclude that Ameren Missouri has the financial ability to construct, operate, and
18 maintain the Cooper Project.

19 *Staff Witness: Dr. Seoung Joun Won, PhD*

²⁴ Staff DR No. 0005, Case No. EA-2024-0237.

²⁵ Staff DR No. 0008, Case No. EA-2024-0237.

²⁶ Ameren Corporation, RatingsDirect, S&P Global Ratings. March 23, 2023.

²⁷ Ameren Corporation, RatingsDirect, S&P Global Ratings. March 20, 2024.

²⁸ S&P Capital IQ Pro. Retrieved December 10, 2024.

²⁹ Staff DR No. 0007, and SEC 10-K, 2023.

³⁰ Staff DR Nos. 0001 and 0002.

Whether the proposal is economically feasible

The Cambridge Dictionary defines “economic feasibility” as “the degree to which the economic advantages of something to be made, done, or achieved are greater than the economic costs.”³¹ Feasibility studies should assess whether a proposed project or solution is financially viable and cost-effective with respect to given alternative solutions.

Ameren Missouri discusses economic feasibility in paragraph 17.b. of its Amended Application. None of its discussion demonstrates that the benefits of the project exceed the costs, or that the proposed project is the most effective project of given alternatives. Several of the points confuse other Tartan criteria with economic feasibility. Instead, Staff found discussion of alternatives as part of the “Job Description” document attached to the response to Staff DR No. 0016. Cost estimates and benefits of the proposed project were further discussed in the responses to Staff DR Nos. 0015 and 0016.1.

On February 12, 2025, Ameren Missouri filed its *Motion for Leave to File Amended CCN Application*. Included in this Amended Application was a revised estimate of project cost of “approximately \$50 million,”³² an increase of approximately \$21.9 million, or 77.8%, from its original estimate provided in its original Application and an increase of approximately \$14.1 million, or 39.3%, from its initial response to Staff DR No. 0007. In response, Staff issued Staff DR No. 0022, which asked for, among other things, “a detailed explanation for the differences and changes between the two estimates.” In response, while Ameren Missouri did not provide a breakdown of the overall costs of the two estimates, there was discussion of the initial bid, not including the full scope of work, revisions to the original proposed project, and that bids

³¹ <https://dictionary.cambridge.org/us/dictionary/english/economic-feasibility> (21NOV2024).

³² Motion for Leave to File Amended CCN Application, Case No. EA-2025-0028, page 6, paragraph 17.c.

1 to complete the work were higher than expected. Additionally, Ameren Missouri further discussed
2 the alternative solution discussed in Staff DR No. 0016.1. While the estimated cost for the
3 alternative solution is only \$22 million, Ameren Missouri states that the estimate is likely
4 underestimated, would be difficult to complete, and require multiple outages instead of one outage.
5 Additionally, this solution would not provide the same reliability and would limit the ability of
6 future generation expansion as compared to the proposed project.

7 Thus, based on these data request responses and the finding of need discussed by Staff
8 witness Shawn E. Lange, Staff finds that the proposed project is likely to be economically feasible.

9 *Staff Witness: Michael L. Stahlman*

10 **Whether the proposal is in the Public Interest**

11 The public interest assessment involves a reconsideration of the other Tartan Criteria. Staff
12 considers the evaluation of the separate Tartan criteria and whether, on balance, the project
13 promotes the public interest. Additionally, Staff reviews the project and whether there are any
14 considerations not covered by the other Tartan Criteria that should be considered in the public
15 interest assessment.

16 In this case, one concerned Missourian provided a consumer comment associated with this
17 case.³³ The consumer is concerned about the safety of electrical lines and environmental impact.
18 Additionally, four neighboring landowners intervened in this case.³⁴

³³ As of March 6, 2024.

³⁴ Joint Application to Intervene of Janice Payne, Gary Estes, Lynn Calicott, Blair Gardner.

Landowner Practices:

Ameren Missouri has been in regular contact³⁵ with the affected landowners.³⁶ Ameren Missouri has owned the property they are proposing to construct the new Cooper Substation on since 1976. Ameren Missouri intends to obtain an easement for new connection transmission lines.³⁷ Ameren Missouri has been in contact with the adjoining landowners, and has been working to address their concerns. Specifically, Ameren Missouri has offered to plant a perimeter tree screening, and to minimize lights being pointed toward the residences from the proposed Cooper Substation.³⁸ Additionally, Ameren Missouri provided in its Amended Application ** [REDACTED]

[REDACTED] . **³⁹

Recommended Conditions:

In Case No. EO-2002-351, the Commission ordered a number of conditions regarding easement acquisition and construction related to Ameren Missouri's CCN for the Callaway-Franks Line. Because this case involves easement acquisition for the ancillary transmission line, Staff recommends similar conditions related to easement acquisition and construction in this CCN. Additionally, Staff recommends a condition related to the provision of any applicable permits.

³⁵ Application, Appendix 3 – Landowner Affidavit; *Response to Order Directing Filing and Status Report*, paragraph 7, dated December 27, 2024; and *Response to Order Directing Filing, Joint Status Report and Unopposed Joint Motion for Extension of Time*, paragraph 6 dated January 27, 2025.

³⁶ 20 CSR 4240-20.045(6)(K)1. states in part: "Land is directly affected if a permanent easement or other permanent property interest would be obtained over all or any portion of the land or if the land contains a habitable structure that would be within three hundred (300) feet of the centerline of an electric transmission line."

³⁷ Application, Paragraph 13.

³⁸ *Response to Order Directing Filing, Joint Status Report and Unopposed Joint Motion for Extension of Time*, paragraph 6, dated January 27, 2025.

³⁹ Amended Application, Supplemental_Appendix 1-CONF, page 25.

Construction and Clearing

1. Prior to construction, Ameren Missouri will notify all landowners in writing of the name and telephone number of Ameren Missouri's Construction Supervisor so they may contact the Construction Supervisor with questions or concerns before, during, and after construction. Such notice will also advise the landowners of the expected start, end dates, and changes to dates, if any, of construction on their properties.
2. Prior to construction, Ameren Missouri's Construction Supervisor will personally contact each landowner to discuss access to the right-of-way on their parcel and any special concerns or requests about which the landowner desires to make Ameren Missouri aware.
3. If Columbia Water and Light reached a written agreement with a landowner when the original Columbia Water and Light easement was granted calling for a particular method of clearing or right-of-way maintenance, Ameren Missouri will honor that agreement unless now prohibited by law from doing so, or unless an alternate agreement is reached with the current property owner.
4. From the beginning of construction until end of construction and clean-up of the right-of-way is complete, Ameren Missouri's Construction Supervisor will be on-site, meaning at or in the vicinity of the route, or on-call, to respond to landowner questions or concerns.
5. If requested by the landowner, Ameren Missouri will cut logs 12" in diameter or more into 10-foot to 20-foot lengths and stack them just outside the right-of-way for handling by the landowner.
6. Stumps will be cut as close to the ground as practical, but in any event will be left no more than 4" above grade.
7. Unless otherwise directed by the landowner, stumps will be treated to prevent regrowth.
8. Unless the landowner does not want the area seeded, disturbed areas will be reseeded with a blend of K31 fescue, perennial rye, and wheat grasses, fertilized, and mulched with straw.
9. Best management practices will be followed to minimize erosion, with the particular practice employed at a given location depending upon terrain, soil, and other relevant factors.
10. Gates will be securely closed after use.
11. Should Ameren Missouri damage a gate, Ameren Missouri will repair that damage.

12. Should a landowner experience radio or tv interference issues believed by the landowner to be attributed to Ameren Missouri's line, Ameren Missouri will work with the landowner in good faith to attempt to solve the problem.

13. Ameren Missouri will clearly mark guy wires.

Maintenance and Repair

1. With regard to future maintenance or repair and right-of-way maintenance after construction is completed, Ameren Missouri will make reasonable efforts to contact landowners prior to entry onto the right-of-way on their property to advise the landowners of Ameren Missouri's presence, particularly if access is near their residence.
2. All Ameren Missouri contractors will be required to carry and maintain a minimum of one million dollars of liability insurance available to respond to damage claims of landowners. All contractors will be required to respond to any landowner damage claims within 24 hours. All contractors will be required to have all licenses required by state, federal, or local law.
3. All right-of-way maintenance contractors will employ foremen that are certified arborists.
4. If herbicides are used, only herbicides approved by the EPA and any applicable state authorities will be used, and herbicides will be used in strict compliance with all labeling directions.
5. Routine maintenance will not occur during wet conditions so as to prevent rutting.
6. Existing access roads will be used to access the right-of-way wherever available.
7. Prior to commencing any vegetation management on the right-of-way, Ameren Missouri will meet personally with all landowners to discuss Ameren Missouri's vegetation management program and plans for their property, and to determine if the landowner does or does not want herbicides used on their property. If the landowner does not want herbicides used, they will not be used.

Right-of-Way Acquisition

1. Every landowner from whom Ameren Missouri requires an easement will be contacted in writing initially, and in-person as a follow-up, if requested by the property owner. Ameren Missouri will negotiate with each such landowner in good faith on the terms and conditions of the easement, its location, and compensation therefor. They will be shown a specific, surveyed location for the easement and be given specific easement terms.
2. After construction is completed, every landowner will be contacted by Ameren Missouri's Construction Supervisor to ensure construction and clean-up was done properly, to discuss any concerns, and to settle any damages that may have occurred.

3. With regard to landowners over whose land an existing Columbia Water and Light easement exists, Ameren Missouri will honor the location shown on the plat given to the original grantor unless otherwise agreed by the landowner and will not treat the easement as a “blanket” easement over the rest of the property.
4. If a landowner so desires, Ameren Missouri will give the landowner a reasonable period of time in advance of construction to harvest any timber the landowner desires to harvest and sell.
5. Ameren Missouri’s right-of-way acquisition policies and practices will not change regardless of whether Ameren Missouri does or does not yet possess a Certificate of Convenience or Necessity from the Commission.

Permits

1. Ameren Missouri shall provide Staff copies of all permits applicable to the project construction. Any such permits shall be provided within 60-days of Ameren Missouri or its contractors obtaining the permit.

Capacitor Bank

1. The approval of this Application does not include the approval for a new Capacitor Bank referenced in paragraph 7 of the initial Application.

As discussed above, the Project is necessary due to outage constraints at the existing Overton substation and generation interconnection requests, Ameren Missouri is qualified to provide the service, has the financial ability, and the proposal is likely to be economically feasible. Therefore, Staff concludes Ameren Missouri owning, operating, and maintaining the Cooper County Substation promotes the public interest with the conditions recommended by Staff.

Staff Witnesses: Donald A. Fontana, PE and Shawn E. Lange, PE

Attachment A - Summary of Application Filing Requirements

Attachment B - Public Comments received through March 6, 2024

Appendix 1 - Staff Credentials

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)	Case No. EA-2025-0028
for a Certificate of Convenience and)	
Necessity to Construct, Own, Operate and)	
Maintain a Transmission Substation in)	
Cooper County, Missouri)	

AFFIDAVIT OF DONALD A. FONTANA, PE

STATE OF MISSOURI)	
)	ss.
COUNTY OF COLE)	

COMES NOW DONALD A. FONTANA, PE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

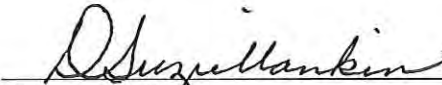


DONALD A. FONTANA, PE

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 13th day of March 2025.





Notary Public

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)	Case No. EA-2025-0028
for a Certificate of Convenience and)	
Necessity to Construct, Own, Operate and)	
Maintain a Transmission Substation in)	
Cooper County, Missouri)	

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 *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

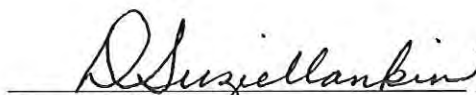
Further the Affiant sayeth not.


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 17th day of March 2025.




Notary Public

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)	Case No. EA-2025-0028
for a Certificate of Convenience and)	
Necessity to Construct, Own, Operate and)	
Maintain a Transmission Substation in)	
Cooper County, Missouri)	

AFFIDAVIT OF MICHAEL L. STAHLMAN

STATE OF MISSOURI)	
)	ss.
COUNTY OF COLE)	

COMES NOW MICHAEL L. STAHLMAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

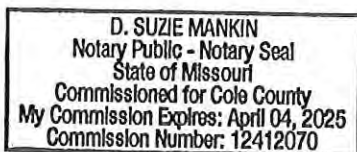
Further the Affiant sayeth not.



MICHAEL L. STAHLMAN

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 13th day of March 2025.





Notary Public

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)	Case No. EA-2025-0028
for a Certificate of Convenience and)	
Necessity to Construct, Own, Operate and)	
Maintain a Transmission Substation in)	
Cooper County, Missouri)	

AFFIDAVIT OF SEOUNG JOUN WON, PhD

STATE OF MISSOURI)	
)	ss.
COUNTY OF COLE)	

COMES NOW SEOUNG JOUN WON, PhD and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

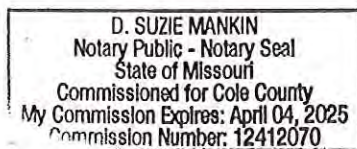
Further the Affiant sayeth not.

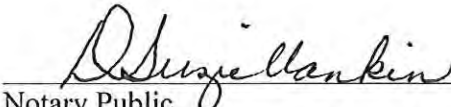


SEOUNG JOUN WON, PhD

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 13th day of March 2025.





Notary Public

Summary of Application Requirements for EA-2025-0028

On July 23, 2024, Union Electric Company, d/b/a Ameren Missouri (“Ameren Missouri”) submitted a Notice of Case Filing, and on October 18, 2024, Ameren Missouri applied for a Certificate of Convenience and Necessity (CCN) in accordance with 393.170.1 RSMo, 20 CSR 4240-2.060, and 20 CSR 4240-20.045 to the Missouri Public Service Commission. The CCN application requests permission for Ameren Missouri to “construct, install, own, operate, maintain, and otherwise control a new 161 kV substation along with ancillary connecting transmission lines to be located in Cooper County, Missouri”. The CCN application also requests permission for Ameren Missouri to “reconfigure an existing 69 kV transmission substation located in Cooper County, Missouri”.

Section 393.170.1, RSMo

Section 393.170.1 requires that for construction of an electrical plant by an electrical corporation, permission and approval by the Commission must be obtained prior to the commencement of construction.

- Ameren Missouri will meet this requirement through the CCN application and review process.

20 CSR 4240-2.060

20 CSR 4240-2.060(1)(A) requires the legal name of each applicant, a brief description of the legal organization of each applicant, whether a Missouri corporation, foreign corporation, partnership, proprietorship, or other business organization, the street and mailing address of the principal office or place of business of each applicant and each applicant’s electronic mail address, fax number and telephone number, if any.

- The section titled Paragraph I. Applicant of the CCN Application contains the required information.
- Ameren Missouri has met this requirement.

20 CSR 4240-2.060(1)(B) requires that if any applicant is a Missouri corporation, they must submit a Certificate of Good Standing from the secretary of state.

- The section titled Paragraph I. Applicant of the CCN Application contains the required information.
- Ameren Missouri has met this requirement.

20 CSR 4240-2.060(1)(C) requires that if any applicant is a foreign corporation, they must submit a certificate from the secretary of state that it is authorized to do business in Missouri.

- This requirement does not apply.

20 CSR 4240-2.060(1)(D) requires that if any applicant is a partnership, a copy of the partnership agreement must be submitted.

- This requirement does not apply.

20 CSR 4240-2.060(1)(E) requires that if any applicant does business under a fictitious name, they must file a copy of the registration of the fictitious name with the secretary of state.

- The section titled Paragraph I. Applicant of the CCN Application contains the required information¹.
- Ameren Missouri has met this requirement.

20 CSR 4240-2.060(1)(F) requires that if any applicant is a political subdivision, a specific reference to the statutory provision and a specific reference to any other authority, if any, under which it operates must be provided.

- This requirement does not apply.

20 CSR 4240-2.060(1)(G) states that if any applicant has submitted the applicable information as detailed in subsections (1)(B)-(F) of this rule in a previous application, the same information may be incorporated by reference to the case number in which the information was furnished, so long as such applicable information is current and correct.

- Applicable information was submitted in a previous application which was properly referenced².
- Ameren Missouri has met this requirement.

20 CSR 4240-2.060(1)(H) requires a brief statement of the character of the business performed by each applicant.

- The section titled Paragraph I. Applicant of the CCN Application contains the required information.
- Ameren Missouri has met this requirement.

20 CSR 4240-2.060(1)(I) requires the name, title, address, and telephone number of the person to whom correspondence, communication, and orders and decision of the Commission are to be sent, if other than to the applicant's legal counsel.

- The name, title, address, and telephone of legal counsel and paralegal were provided in the CCN Application³.
- Ameren Missouri has met this requirement.

¹ See File No. EA-2024-0237.

² See CCN Application, I. Applicant which references File No. EA-87-105, and, File No. EA-2024-0237.

³ See page 2, paragraph 2 of the CCN Application.

20 CSR 4240-2.060(1)(K) requires a statement indicating whether the applicant has any pending or final unsatisfied judgments or decisions against it from any state or federal agency or court which involve customer service or rates, which action, judgment or decision has occurred within three (3) years of the date of the application.

- Ameren Missouri has no final unsatisfied judgments or decisions against it from any state or federal agency or court that involve customer services or rates, which action, judgment, or decision has occurred within three years of the date of this application⁴.
- Ameren Missouri has met this requirement.

20 CSR 4240-2.060(1)(L) requires a statement that there is no annual report or regulatory assessment fees that are overdue.

- Ameren Missouri has no overdue annual report or regulatory assessment fees⁵.
- Ameren Missouri has met this requirement.

20 CSR 4240-2.060(1)(M) requires that all applications shall be subscribed and verified by affidavit under oath by one (1) of the following methods: if an individual, by that individual; if a partnership, by an authorized member of the partnership; if a corporation, by an authorized officer of the corporation; if a municipality or political subdivision, by an authorized officer of the municipality or political subdivision; or by the attorney for the applicant if the application includes or is accompanied by a verified statement that the attorney is authorized.

- Subscribed verification provided by Mr. Warren Wood, Vice-President Regulatory and Legislative Affairs for Union Electric Company, d/b/a Ameren Missouri on page 11 of the CCN application.
- Ameren Missouri has met this requirement.

20 CSR-4240-20.045

20 CSR 4240-20.045(3)(A) requires that the application shall include facts showing that granting the application is necessary or convenient for the public service.

- Ameren Missouri has included facts that support their application on page 5, paragraph 16 of the application.
- Ameren Missouri has met this requirement.

20 CSR 4240-20.045 (3)(B) requires that if an asset to be operated or constructed is outside Missouri, the application shall include plans for allocating costs, other than regional transmission organization / independent system operator cost sharing, to the applicable jurisdiction.

- This requirement does not apply.

⁴ See page 2, paragraph 3 of the CCN Application.

⁵ See page 2, paragraph 4 of the CCN Application.

20 CSR 4240-20.045(3)(C) requires that if any of the items required under this rule are unavailable at the time the application is filed, the unavailable items may be filed prior to the granting of authority by the Commission, or the Commission may grant the certificate subject to the condition that the unavailable items be filed before authority under the certificate is exercised.

- This requirement does not apply.

20 CSR 4240-20.045(6)(A) requires a description of the proposed route or site of construction.

- This information can be found in Appendix 2 of the initial CCN Application and in the supplement to Appendix 1 of the Amended CCN Application.
- Ameren Missouri has met this requirement.

20 CSR 4240-20.045(6)(B) requires a list of all electric, gas, and telephone conduit, wires, cables, and lines of regulated and nonregulated utilities, railroad tracks, and each underground facility, as defined in section 319.015, RSMo, which the proposed construction will cross.

- Page 7, paragraphs 19, 20, and 21 of the CCN Application address this rule.
- Ameren Missouri has met this requirement.

20 CSR 4240-20.045(6)(C) requires a description of the plans, specifications, and estimated costs for the complete scope of the construction project that also clearly identifies what will be the operational features of the asset once it is fully operational and used for service.

- Page 7, paragraphs 22, 23, and footnote 6 provide details in compliance with this rule.
- Ameren Missouri has met this requirement.

20 CSR 4240-20.045(6)(D) requires the projected beginning of construction date and the anticipated fully operational and used for service date of the asset.

- Page 7, paragraph 24 details this requirement.
- Ameren Missouri has met this requirement.

20 CSR 4240-20.045(6)(E) requires a description of any common plant to be included in the construction project.

- Ameren Missouri states that they anticipate that no portion of the proposed new facility will be shared with any other plant on page 7, paragraph 25.
- Ameren Missouri has met this requirement.

20 CSR 4240-20.045(6)(F) requires plans for financing the construction of the asset.

- Ameren Missouri intends to fund this construction through existing funds they possess.
- Ameren Missouri has met this requirement.

20 CSR 4240-045(6)(G) requires a description of how the proposed asset relates to the electric utility's adopted preferred plan under 4 CSR 240-22.

- Ameren Missouri states that their proposed construction is consistent with their Preferred Resource Plan⁶. While the proposed Cooper substation is not directly named in the MTEP Transmission Projects in Missouri (referenced in Footnote 6, of the 2023 Integrated Resource plan), the addition of a second transformer and a 161 kV Capacitor Bank at the Overton substation is in Table 7A.2 of the MTEP. The proposed Cooper substation project does generally comport with the intent of the other projects at the existing 345 kV / 161 kV and 161 kV / 69 kV Overton substations.⁷
- Ameren Missouri has addressed this requirement.

20 CSR 4240-045(6)(H) requires an overview of the electric utility's plan for this project regarding competitive bidding, although competitive bidding is not required, for the design, engineering, procurement, construction management, and construction of the asset.

- Page 8, paragraph 28 goes into detail about the rule requirement.
- Ameren Missouri has met this requirement.

20 CSR 4240-045(6)(I) requires an overview of plans for operating and maintaining an asset.

- Pages 8, and 9, paragraphs 29, and 30 of the CCN Application describe how this requirement will be accomplished. Essentially, all of their substations are operated from a remote, primary control center which allows Ameren Missouri staff to “perform all operational switching and coordination with adjacent and interconnected systems”. All maintenance activities “will be performed by Ameren Missouri or Ameren Services employees, or contractors retained by them” similar to how they perform maintenance on all other Ameren Missouri substations.
- Ameren Missouri has met this requirement.

20 CSR 4240-20.045(6)(J) requires an overview of plans for safe and adequate service after significant, unplanned/forced outages of an asset.

- Ameren Missouri details how this requirement will be achieved on page 9, paragraph 31 of the CCN Application. Ameren Missouri follows a documented process which governs how they respond to unplanned outages, and work through their processes to safely restore operations as quickly as possible.
- Ameren Missouri has met this requirement.

⁶ See Case No. ER-2024-0020, 2023 Integrated Resource Plan, Chapter 7, Appendix A, Table 7A.2 MTEP Transmission Projects in Missouri, pages 7 and 8.

⁷ See File No. EA-2025-0028, Amended Application, Section II, Paragraphs 6 - 15, on pages 3 - 5 for a more detailed explanation.

20 CSR 4240-20.045(6)(K) requires an affidavit or other verified certification of compliance with the following notice requirements to landowners directly affected by electric transmission line routes or transmission substation locations proposed by the application. The proof of compliance shall include a list of all directly affected landowners to whom notice was sent.

- Appendix 3 of the CCN Application contains the affidavit and a list of landowners that were notified.

Ameren Missouri has met this requirement.

Case No. EA-2025-0028

ATTACHMENT B

HAS BEEN DEEMED

CONFIDENTIAL

IN ITS ENTIRETY

Donald A. Fontana, PE

Current Position:

I am a Senior Professional Engineer in the Engineering Analysis Department – Industry Analysis Division of the Missouri Public Service Commission.

Educational Background and Work Experience:

I received a Bachelor of Science degree in Civil Engineering from the University of Missouri – Columbia in 1998.

I was employed as a consultant Designer (Engineer-In-Training) by Central Missouri Professional Services from June, 1998 through May, 2003. My primary job duties were design of sanitary sewer mains and on-site treatment systems; commercial site plan design; County road upgrade design (all under Professional Engineer supervision); and, easement description writing and review; ALTA survey drafting and description writing; subdivision drafting and legal description writing; and, Land Survey drafting and legal description writing (all under Registered Surveyor supervision).

I was next employed as a Design Engineer and Project Manager by the Missouri Department of Conservation from May, 2003 to March, 2007. I obtained licensure in Missouri as a Professional Engineer in 2004 (License Number 2004017168). My primary job duties were design of warm-water fish hatchery and cold-water fish hatchery upgrades; design of boat ramps; design of sanitary sewer systems for Regional Office buildings; and, project management.

I was next employed by the City of Jefferson City, Missouri – Department of Public Works from March, 2007 to November, 2024, as the City's Stormwater Engineer and Floodplain Administrator. My primary job duties were stormwater system design and some project management; management of all Storm Water Management Program Plan components for compliance with the City's Municipal Separate Stormwater System (MS4) permit which was mandated by the USEPA and administered by the Missouri Department of Natural Resources (MDNR); managed and maintained compliance with the City's MDNR Land Disturbance permit; managed and maintained compliance with the Jefferson City Regional Airport's MDNR General Discharge permit; managed all aspects of the City's Floodplain Development program and maintained compliance with the National Flood Insurance Program (NFIP) participating community requirements; including, Floodplain Development permit application review; Floodplain Development permit approval / denial; City Flood Code enforcement; and assisted with Plan Review pertaining to the City's MS4 permit, MDNR Land Disturbance permit, and Floodplain Development program compliance. Other duties involved fielding and responding to stormwater, flooding, and, erosion complaints from the public, and working with them to achieve a solution that was satisfactory to them.

I have been employed as a staff member with the Missouri Public Service Commission from December, 2024 through the present (currently February, 2025). To date, I have provided no testimony before the Missouri Public Service Commission.

CREDENTIALS AND CASE PARTICIPATION OF
SHAWN E. LANGE, PE

PRESENT POSITION:

I am a Professional Engineer in the Engineering Analysis Department, Industry Analysis Division, of the Missouri Public Service Commission.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

In December 2002, I received a Bachelor of Science Degree in Mechanical Engineering from the University of Missouri, at Rolla now known as the Missouri University of Science and Technology. I joined the Commission Staff in January 2005. I am a registered Professional Engineer in the State of Missouri and my license number is 2018000230.

TESTIMONY FILED:

Case Number	Utility	Testimony	Issue
ER-2005-0436	Aquila Inc.	Direct	Weather Normalization
		Rebuttal	Weather Normalization
		Surrebuttal	Weather Normalization
ER-2006-0314	Kansas City Power & Light Company	Direct	Weather Normalization
		Rebuttal	Weather Normalization
ER-2006-0315	Empire District Electric Company	Direct	Weather Normalization
		Surrebuttal	Weather Normalization
ER-2007-0002	Union Electric Company d/b/a AmerenUE	Direct	Weather Normalization
ER-2007-0004	Aquila Inc.	Direct	Weather Normalization
ER-2007-0291	Kansas City Power & Light Company	Staff Report	Weather Normalization
		Rebuttal	Weather Normalization
ER-2008-0093	Empire District Electric Company	Staff Report	Weather Normalization
ER-2008-0318	Union Electric Company d/b/a AmerenUE	Staff Report	Weather Normalization

Case Number	Utility	Testimony	Issue
ER-2009-0089	Kansas City Power & Light Company	Staff Report	Net System Input
ER-2009-0090	KCP&L Greater Missouri Operations Company	Staff Report	Net System Input
ER-2010-0036	Union Electric Company d/b/a AmerenUE	Staff Report	Net System Input
ER-2010-0130	Empire District Electric Company	Staff Report	Variable Fuel Costs
		Surrebuttal	Variable Fuel Costs
ER-2010-0355	Kansas City Power & Light Company	Staff Report	Variable Fuel Costs
ER-2010-0356	KCP&L Greater Missouri Operations Company	Staff Report	Engineering Review-Sibley 3 SCR
ER-2011-0004	Empire District Electric Company	Staff Report	Variable Fuel Costs
ER-2011-0028	Union Electric Company d/b/a Ameren Missouri	Staff Report	Net System Input
ER-2012-0166	Union Electric Company d/b/a Ameren Missouri	Staff Report	Weather Normalization
		Surrebuttal	Weather Normalization Maryland Heights In-Service
ER-2012-0174	Kansas City Power & Light Company	Staff Report	Weather Normalization Net System Input Variable Fuel Costs
		Surrebuttal	Weather Normalization
ER-2012-0175	KCP&L Greater Missouri Operations Company	Staff Report	Weather Normalization Net System Input
		Surrebuttal	Weather Normalization
ER-2012-0345	Empire District Electric Company	Rebuttal	Interim Rates
		Staff Report	Weather Normalization
EC-2014-0223	Noranda Aluminum v. Ameren Missouri	Rebuttal	Weather Normalization
EA-2014-0207	Grain Belt Express CCN	Rebuttal	Certificates of Convenience/Feasibility Analysis
		Surrebuttal	

Case Number	Utility	Testimony	Issue
ER-2014-0258	Union Electric Company d/b/a Ameren Missouri	Staff Report	Net System Input Variable Fuel Costs
ER-2014-0351	Empire District Electric Company	Staff Report	Net System Input Variable Fuel Costs
ER-2014-0370	Kansas City Power & Light Company	Staff Report	Net System Input Variable Fuel Costs
		True-up Direct	Variable Fuel Costs La Cygne In-service
EA-2015-0146	ATXI CCN	Rebuttal	Certificates of Convenience/Feasibility Analysis
		Surrebuttal	
ER-2016-0023	Empire District Electric Company	Staff Report	Net System Input Variable Fuel Costs
		Surrebuttal	Variable Fuel Costs
ER-2016-0179	Union Electric Company d/b/a Ameren Missouri	Staff Report	Variable Fuel Costs
EA-2016-0385	Grain Belt Express CCN	Rebuttal	Certificates of Convenience/Feasibility Analysis
		Surrebuttal	
ER-2018-0145	Kansas City Power & Light Company	Staff Report	Variable Fuel Costs Market Prices
		Rebuttal	Variable Fuel Costs Market Prices
		True-up Direct	Variable Fuel Costs Market Prices
EA-2018-0327	ATXI CCN	Rebuttal	Certificates of Convenience/Feasibility Analysis
EA-2019-0021	Ameren CCN	Staff Report	Certificates of Convenience/Feasibility Analysis
EA-2019-0010	Empire District Electric Company CCN	Staff Report	Certificates of Convenience/Feasibility Analysis
EC-2020-0408	MLA v. Grain Belt Complaint	Staff Recommendation	Formal Complaint
EA-2021-0167	ATXI CCN	Staff Recommendation	Certificates of Convenience/Feasibility Analysis

Case Number	Utility	Testimony	Issue
EA-2021-0087	ATXI CCN	Staff Report	Certificates of Convenience/Feasibility Analysis
ER-2021-0240	Union Electric Company d/b/a Ameren Missouri	Staff Report	Variable Fuel Costs Atchison wind farm Construction Audit and in-service review
		Rebuttal	Atchison in-service and Variable Fuel Costs
		True-up Direct	Variable Fuel Costs
ER-2021-0312	Empire District Electric Company	Staff Report	Transmission and Distribution Investment
EA-2022-0043	Evergy Metro and Evergy West Hawthorn Solar CCN	Staff Report	Certificates of Convenience/Feasibility Analysis
EA-2022-0099	ATXI CCN	Staff Direct Testimony	Certificates of Convenience/Feasibility Analysis
EA-2022-0244	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificates of Convenience/Feasibility Analysis
EA-2022-0245	Union Electric Company d/b/a Ameren Missouri	Staff Rebuttal Testimony	Certificates of Convenience/Feasibility Analysis
ER-2022-0337	Union Electric Company d/b/a Ameren Missouri	Direct Testimony	Variable fuel Costs
		Rebuttal Testimony	Variable fuel Costs
		Surrebuttal/True-up Direct	Variable fuel Costs
		True-up Rebuttal	Variable fuel Costs
EA-2022-0328	Evergy West	Staff Rebuttal Testimony	Certificates of Convenience/Feasibility Analysis
EA-2023-0017	GrainBelt Express	Staff Rebuttal Testimony	Certificates of Convenience/Feasibility Analysis

Case Number	Utility	Testimony	Issue
EA-2023-0226	Ameren Missouri	Staff Memo	Certificates of Convenience/Feasibility Analysis
ET-2023-0249	Ameren Missouri	Staff Memo	Cogeneration and Net Metering rate
EA-2024-0286	Ameren Missouri	Rebuttal Testimony	Certificates of Convenience/Feasibility Analysis
EF-2024-0021	Ameren Missouri	Rebuttal	Financing Order Authorizing the Issue of Securitized Utility Tariff Bonds
ER-2024-0189	Evergy Missouri West	Rebuttal	Variable Fuel Cost
EA-2024-0237	Ameren Missouri	Staff Memo/Report	Certificates of Convenience/Feasibility Analysis
ER-2024-0319	Ameren Missouri	Staff Direct	Variable Fuel Costs
		Staff True-up Direct	Variable Fuel Cost

Michael L. Stahlman

Education

2009 M. S., Agricultural Economics, University of Missouri, Columbia.
2007 B.A., Economics, Summa Cum Laude, Westminster College, Fulton, MO.

Professional Experience

2010 - Regulatory Economist, Missouri Public Service Commission
2007 – 2009 Graduate Research Assistant, University of Missouri
2008 Graduate Teaching Assistant, University of Missouri
2007 American Institute for Economic Research (AIER) Summer
Fellowship Program
2006 Price Analysis Intern, Food and Agricultural Policy Research Institute
(FAPRI), Columbia, MO
2006 Legislative Intern for State Representative Munzlinger
2005 – 2006 Certified Tutor in Macroeconomics, Westminster College, Fulton, MO
1998 – 2004 Engineering Watch Supervisor, United States Navy

Expert Witness Testimony

Union Electric Company d/b/a AmerenUE GR-2010-0363
In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File
Tariffs Increasing Rates for Natural Gas Service Provided to Customers in the
Company's Missouri Service Area

Union Electric Company d/b/a Ameren Missouri GT-2011-0410
In the Matter of the Union Electric Company's (d/b/a Ameren Missouri) Gas
Service Tariffs Removing Certain Provisions for Rebates from Its Missouri Energy
Efficient Natural Gas Equipment and Building Shell Measure Rebate Program

KCP&L Great Missouri Operations Company EO-2012-0009
In the Matter of KCP&L Greater Missouri Operations Company's Notice of Intent
to File an Application for Authority to Establish a Demand-Side Programs
Investment Mechanism

Union Electric Company d/b/a Ameren Missouri EO-2012-0142
In the Matter of Union Electric Company d/b/a Ameren Missouri's Filing to
Implement Regulatory Changes Furtherance of Energy Efficiency as Allowed by
MEEIA

Kansas City Power & Light Company EO-2012-0323
In the Matter of the Resource Plan of Kansas City Power & Light Company

KCP&L Great Missouri Operations Company EO-2012-0324
In the Matter of the Resource Plan of KCP&L Greater Missouri Operations
Company

Kansas City Power & Light Company EO-2012-0135

KCP&L Great Missouri Operations Company EO-2012-0136
In the Matter of the Application of Kansas City Power & Light Company
[KCP&L Great Missouri Operations Company] for Authority to Extend the
Transfer of Functional Control of Certain Transmission Assets to the Southwest
Power Pool, Inc.

Kansas City Power & Light Company, KCP&L Great Missouri Operations Company, and Transource Missouri EA-2013-0098
EO-2012-0367

In the Matter of the Application of Transource Missouri, LLC for a Certificate of Convenience and Necessity Authorizing it to Construct, Finance, Own, Operate, and Maintain the Iatan-Nashua and Sibley-Nebraska City Electric Transmission Projects

Kansas City Power & Light Company EU-2014-0077
KCP&L Great Missouri Operations Company

In the Matter of the Application of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company for the Issuance of an Accounting Authority Order relating to their Electrical Operations and for a Contingent Waiver of the Notice Requirement of 4 CSR 240-4.020(2)

Kansas City Power & Light Company EO-2014-0095
In the Matter of Kansas City Power & Light Company's Notice of Intent to File an Application for Authority To Establish a Demand-Side Programs Investment Mechanism

Veolia Energy Kansas City, Inc HR-2014-0066
In the Matter of Veolia Energy Kansas City, Inc for Authority to File Tariffs to Increase Rates

Grain Belt Express Clean Line, LLC EA-2014-0207
In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing It to Construct, Own, Operate, Control, Manage, and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood - Montgomery 345 kV Transmission Line

Union Electric Company d/b/a Ameren Missouri ER-2014-0258
In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase Its Revenues for Electric Service

Empire District Electric Company ER-2014-0351
In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area

Kansas City Power & Light Company ER-2014-0370
In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service

Kansas City Power & Light Company EO-2014-0240
In the Matter of Kansas City Power & Light Company's Filing for Approval of Demand-Side Programs and for Authority to Establish a Demand-Side Programs Investment Mechanism

KCP&L Great Missouri Operations Company EO-2014-0241
In the Matter of KCP&L Greater Missouri Operations Company's Filing for Approval of Demand-Side Programs and for Authority to Establish a Demand-Side Programs Investment Mechanism

- Ameren Transmission Company of Illinois EA-2015-0146
In the Matter of the Application of Ameren Transmission Company of Illinois for Other Relief or, in the Alternative, a Certificate of Public Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage a 345,000-volt Electric Transmission Line from Palmyra, Missouri to the Iowa Border and an Associated Substation Near Kirksville, Missouri
- Empire District Electric Company ER-2016-0023
In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service
- KCP&L Great Missouri Operations Company ER-2016-0156
In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service
- Kansas City Power & Light Company ER-2016-0285
In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service
- Union Electric Company d/b/a Ameren Missouri ER-2016-0179
In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase Its Revenues for Electric Service
- Grain Belt Express Clean Line, LLC EA-2016-0358
In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing it to Construct, Own, Operate, Control, Manage and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood-Montgomery 345kV transmission line.
- Spire Missouri, Inc. GR-2017-0215 and GR-2017-0216
In the Matter of Spire Missouri, Inc.'s Request to Increase Its Revenues for Gas Service
- Liberty Utilities GR-2018-0013
In the Matter of Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities' Tariff Revisions Designed to Implement a General Rate Increase for Natural Gas Service in the Missouri Service Areas of the Company
- Spire Missouri, Inc. GO-2019-0058 and GO-2019-0059
In the Matter of Spire Missouri, Inc. d/b/a Spire's Request to Decrease [Increase] WNAR
- Grain Belt Express Clean Line LLC EM-2019-0150
Invenergy Transmission LLC
Invenergy Investment Company LLC
In the Matter of the Joint Application of Invenergy Transmission LLC, Invenergy Investment Company LLC, Grain Belt Express Clean Line LLC and Grain Belt Express Holding LLC for an Order Approving the Acquisition by Invenergy Transmission LLC of Grain Belt Express Clean Line LLC

Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Increase its Revenues for Natural Gas Service	GR-2019-0077
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Decrease Its Revenues for Electric Service	ER-2019-0335
Empire District Electric Company In the Matter of The Empire District Electric Company's Request for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in its Missouri Service Area	ER-2019-0374
Union Electric Company d/b/a Ameren Missouri In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Permission and Approval and a Certificate of Public Convenience and Necessity Under 20 CSR 4240-3.105	EA-2020-0371
Spire Missouri, Inc. In the Matter of Spire Missouri Inc.'s d/b/a Spire Request for Authority to Implement a General Rate Increase for Natural Gas Service Provided in the Company's Missouri Service Areas	GR-2021-0108
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust Its Revenues for Electric Service	ER-2021-0240
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust Its Revenues for Natural Gas Service	GR-2021-0241
The Empire District Electric Company In the Matter of the Request of The Empire District Electric Company d/b/a Liberty for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in its Missouri Service Area	ER-2021-0312
The Empire District Gas Company In the Matter of The Empire District Gas Company's d/b/a Liberty Request to File Tariffs to Change its Rates for Natural Gas Service	GR-2021-0320
Ameren Transmission Company of Illinois In the Matter of the Application of Ameren Transmission Company of Illinois for a Certificate of Convenience and Necessity Under Section 393.170.1, RSMo. Relating to Transmission Investments in Southeast Missouri	EA-2022-0099
Evergy Metro, Inc d/b/a Evergy Missouri Metro In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's Request for Authority to Implement A General Rate Increase for Electric Service	ER-2022-0129
Evergy Missouri West, Inc. d/b/a Evergy Missouri West 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	ER-2022-0130

- Spire Missouri, Inc. GR-2022-0179
In the Matter of Spire Missouri, Inc. d/b/a Spire's Request for Authority to
Implement a General Rate Increase for Natural Gas Service Provided in the
Company's Missouri Service Areas
- Union Electric Company d/b/a Ameren Missouri EA-2022-0245
In the Matter of the Application of Union Electric Company d/b/a Ameren
Missouri for Approval of a Subscription-Based Renewable Energy Program
- Union Electric Company d/b/a Ameren Missouri ER-2022-0337
In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to
Adjust Its Revenues for Electric Service
- Grain Belt Express Clean Line LLC EA-2023-0017
In the Matter of the Application of Grain Belt Express LLC for an Amendment to
its Certificate of Convenience and Necessity Authorizing it to Construct, Own,
Operate, Control, Manage, and Maintain a High Voltage, Direct Current
Transmission Line and Associated Converter Station
- Union Electric Company d/b/a Ameren Missouri EA-2023-0286
In the Matter of the Application of Union Electric Company d/b/a Ameren
Missouri for Permission and Approval and Certificates of Public Convenience and
Necessity Authorizing it to Construct Renewable Generation Facilities
- Evergy Metro, Inc d/b/a Evergy Missouri Metro EO-2024-0002
Evergy Missouri West, Inc. d/b/a Evergy Missouri West
In the Matter of Requests for Customer Account Data Production from Evergy
Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a
Evergy Missouri West
- Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty GR-2024-0106
In the Matter of the Request of Liberty Utilities (Midstates Natural Gas) Corp.
d/b/a Liberty to Implement a General Rate Increase for Natural Gas Service in the
Missouri Service Areas of the Company
- Evergy Missouri West, Inc. d/b/a Evergy Missouri West ER-2024-0189
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
- Union Electric Company d/b/a Ameren Missouri ER-2024-0319
In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to
Adjust Its Revenues for Electric Service

Selected Manuscripts

Stahlman, Michael and Laura M.J. McCann. "Technology Characteristics, Choice
Architecture and Farmer Knowledge: The Case of Phytase." *Agriculture and
Human Values* (2012) 29: 371-379.

Stahlman, Michael. "The Amoral of Signals." Awarded in top 50 authors for SEVEN
Fund essay competition, "The Morality of Profit."

Credentials and Background of
Seoung Joun Won, PhD

I am currently employed as a Regulatory Compliance Manager in the Financial Analysis Department of the Financial and Business Analysis Division of the Missouri Public Service Commission. I have been employed at the Missouri Public Service Commission since May 2010.

I received my Bachelor of Arts, Master of Arts, and Doctor of Philosophy in Mathematics from Yonsei University and my Bachelor of Business Administration in Financial Accounting from Seoul Digital University in Seoul, South Korea, and earned my Doctor of Philosophy in Economics from the University of Missouri - Columbia. Also, I passed several certificate examinations for Finance Specialist in South Korea such as Accounting Management, Financial Risk Manager, Enterprise Resource Planning Accounting Consultant, Derivatives Investment Advisor, Securities Investment Advisor, and Financial Planner.

Prior to joining the Commission, I taught both undergraduate and graduate level mathematics at the Korean Air Force Academy and Yonsei University for 13 years. I served as the director of the Education and Technology Research Center in NeoEdu for 5 years. Before starting my current position at the Missouri Public Service Commission, I had served as a regulatory economist in Tariff/Rate Design Department.

My current duties at the Commission include financial analysis of rate of return and cost of equity, valuation analysis on merger and acquisition, due diligence review and supporting economic and statistical analysis.

List of Previous Testimony Filed

Seoung Joun Won, PhD

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
GA-2025-0181	Spire Missouri, Inc. d/b/a Spire	Financial Capability
GR-2024-0369	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
EA-2024-0302	Ameren Transmission Company of Illinois	Financial Capability
ER-2024-0319	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
GA-2024-0361	Spire Missouri, Inc. d/b/a Spire	Financial Capability
WM-2025-0017	Missouri-American Water Company	Merger and Acquisition
EA-2024-0237	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
GF-2025-0053	Spire Missouri, Inc. d/b/a Spire	Financing Authority
EF-2025-0047	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
ER-2024-0212	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
WF-2024-0353	Missouri-American Water Company	Financing Authority
WA-2024-0325	Missouri-American Water Company	Financial Capability
ER-2024-0189	Evergy Missouri West, Inc. d/b/a Evergy Missouri West	Rate of Return, Capital Structure
GA-2024-0257	Spire Missouri, Inc. d/b/a Spire	Financial Capability
EO-2023-0448	Union Electric Co., d/b/a Ameren Missouri	Nuclear Decommissioning

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
GA-2024-0243	Spire Missouri, Inc. d/b/a Spire	Financial Capability
EA-2024-0147	Ameren Transmission Company of Illinois	Financial Capability
EA-2023-0131	Empire District Electric Company, d/b/a Liberty	Financial Capability
EF-2024-0192	Evergy Metro, Inc. d/b/a Evergy Missouri Metro	Financing Authority
WF-2024-0135	Liberty Utilities (Missouri Water) LLC d/b/a Liberty	Financing Authority
EF-2024-0099	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
GA-2024-0100	Spire Missouri, Inc. d/b/a Spire	Financial Capability
EA-2023-0286	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
GA-2023-0441	Spire Missouri, Inc. d/b/a Spire	Financial Capability
EF-2023-0425	Evergy Metro Inc., d/b/a Evergy Missouri Metro	Financing Authority
SA-2023-0435	Missouri-American Water Company	Financial Capability
WA-2023-0434	Missouri-American Water Company	Financial Capability
GA-2023-0389	Spire Missouri, Inc. d/b/a Spire	Financial Capability
GA-2023-0374	Spire Missouri, Inc. d/b/a Spire	Financial Capability
GF-2023-0280	Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty	Financing Authority
WA-2023-0345	Missouri-American Water Company	Financial Capability
EA-2023-0226	Union Electric Co., d/b/a Ameren Missouri	Financial Capability

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
EA-2023-0017	Grain Belt Express LLC	Financial Capability
GA-2023-0038	Spire Missouri, Inc. d/b/a Spire	Financial Capability
EF-2022-0151	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
EA-2022-0328	Evergy Missouri West, Inc. d/b/a Evergy Missouri West	Financial Capability
ER-2022-0337	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
EA-2022-0245	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2022-0244	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2022-0234	NextEra Energy Transmission Southwest, LLC	Financial Capability
GR-2022-0179	Spire Missouri, Inc., d/b/a Spire	Rate of Return, Capital Structure
GF-2022- 0169	Spire Missouri, Inc.	Financing Authority
EF-2022-0164	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
WF-2022-0161	Missouri-American Water Company	Financing Authority
ER-2022-0130	Evergy Missouri West, Inc., d/b/a Evergy Missouri West	Rate of Return, Capital Structure
ER-2022-0129	Evergy Metro Inc., d/b/a Evergy Missouri Metro	Rate of Return, Capital Structure
EF-2022- 0103	Evergy Missouri West, Inc.	Financing Authority
WF-2022-0066	Missouri American Water Company	Financing Authority
WF-2021-0427	Raytown Water Company	Financing Authority

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
GR-2021-0320	Empire District Gas Company	Rate of Return, Capital Structure
ER-2021-0312	Empire District Electric Company	Rate of Return, Capital Structure
GR-2021-0241	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
ER-2021-0240	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
GR-2021-0108	Spire Missouri, Inc.	Rate of Return, Capital Structure
EA-2021-0087	Ameren Transmission Company of Illinois	Financial Capability
EA-2020-0371	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
SR-2020-0345	Missouri American Water Company	Rate of Return, Capital Structure
WR-2020-0344	Missouri American Water Company	Rate of Return, Capital Structure
EF-2020-0301	Evergy Missouri Metro	Financing Authority
WR-2020-0264	Raytown Water Company	Rate of Return, Capital Structure
WR-2020-0053	Confluence Rivers Utility Operating Company, Inc.	Rate of Return, Capital Structure
HM-2020-0039	Veolia Energy Kansas City, Inc. AIP Project Franklin Bidco	Merger and Acquisition
EO-2019-0133	KCP&L Greater Missouri Operations Company, Evergy Metro	Business Process Efficiency
EO-2019-0132	Kansas City Power & Light Company, Evergy Metro	Business Process Efficiency
GR-2019-0077	Union Electric Co., d/b/a Ameren Missouri	Weather & Normalization, Net System Input
GO-2019-0059	Spire West, Spire Missouri, Inc.	Weather Variables

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
GO-2019-0058	Spire East., Spire Missouri, Inc.	Weather Variables
ER-2018-0146	KCP&L Greater Missouri Operations Co.	Weather & Normalization, Net System Input
ER-2018-0145	Kansas City Power & Light Co.	Weather & Normalization, Net System Input
GR-2018-0013	Liberty Utilities (Midstates Natural Gas) Corp.	Weather Variables
GR-2017-0216	Missouri Gas Energy (Laclede), Spire Missouri, Inc.	Weather Variables
GR-2017-0215	Laclede Gas Co., Spire Missouri, Inc.	Weather Variables
ER-2016-0285	Kansas City Power & Light Co.	Weather & Normalization, Net System Input
ER-2016-0179	Union Electric Co., d/b/a Ameren Missouri	Weather & Normalization, Net System Input
ER-2016-0156	KCP&L Greater Missouri Operations Co.	Weather & Normalization, Net System Input
ER-2016-0023	Empire District Electric Company	Weather & Normalization, Net System Input
ER-2014-0370	Kansas City Power & Light Co	Weather & Normalization, Net System Input
ER-2014-0351	Empire District Electric Company	Weather & Normalization, Net System Input
ER-2014-0258	Union Electric Co., d/b/a Ameren Missouri	Weather & Normalization, Net System Input
EC-2014-0223	Noranda Aluminum, Inc., et al, Complaint v. Union Electric Co., d/b/a Ameren Missouri	Weather Variables
GR-2014-0152	Liberty Utilities (Midstates Natural Gas) Corp.	Weather Variables
GR-2014-0086	Summit Natural Gas of Missouri, Inc.	Weather Variables
HR-2014-0066	Veolia Energy Kansas City, Inc.	Weather Variables, Revenue

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
GR-2013-0171	Laclede Gas Co.	Weather Variables
ER-2012-0345	Empire District Electric Company	Weather Variables, Revenue
ER-2012-0175	KCP&L Greater Missouri Operations Co.	Weather Variables
ER-2012-0174	Kansas City Power & Light Co.	Weather Variables
ER-2012-0166	Union Electric Co., d/b/a Ameren Missouri	Weather Variables, Revenue
HR-2011-0241	Veolia Energy Kansas City, Inc.	Weather Variables
ER-2011-0028	Union Electric Co., d/b/a Ameren Missouri	Weather Variables, Revenue
ER-2011-0004	Empire District Electric Company	Weather Variables, Revenue
GR-2010-0363	Union Electric Co., d/b/a Ameren Missouri	Weather Variables
ER-2010-0356	KCP&L Greater Missouri Operations Co.	Weather Variables
ER-2010-0355	Kansas City Power & Light Co.	Weather Variables, Revenue

Work Related Publication

Won, Seoung Joun, X. Henry Wang, and Henry E. Warren. "Climate normals and weather normalization for utility regulation." *Energy Economics* (2016).