

Exhibit No.:
Issue(s): *Miscellaneous Adjustments*
Witness: *Karen Lyons*
Sponsoring Party: *MoPSC Staff*
Type of Exhibit: *Direct Testimony*
Case No.: *ER-2022-0337*
Date Testimony Prepared: *January 10, 2023*

MISSOURI PUBLIC SERVICE COMMISSION
FINANCIAL AND BUSINESS ANALYSIS DIVISION
AUDITING DEPARTMENT

DIRECT TESTIMONY
Revenue Requirement

OF

KAREN LYONS

UNION ELECTRIC COMPANY,
d/b/a AMEREN MISSOURI

CASE NO. ER-2022-0337

Jefferson City, Missouri
January 2023

1 **TABLE OF CONTENTS OF**

2 **DIRECT TESTIMONY OF**

3 **KAREN LYONS**

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

6 **CASE NO. ER-2022-0337**

7 EXECUTIVE SUMMARY2
8 CAPACITY AND ENERGY SALES4
9 PURCHASED POWER.....6
10 MIDCONTINENT INDEPENDENT SYSTEM OPERATOR COSTS.....6
11 RUSH ISLAND SYSTEM SUPPORT RESOURCE (“SSR”) COMPENSATION9
12 MISO TRANSMISSION REVENUE AND EXPENSE10
13 SOUTHWEST POWER POOL ENERGY REVENUE AND EXPENSE.....13
14 FERC ROE COMPLAINT CASES.....14
15 EMISSION ALLOWANCE AND RENEWABLE ENERGY CREDITS15
16 PROPERTY TAX EXPENSE16
17 PAPERLESS BILL CREDIT18
18 PAY AS YOU SAVE20
19 ELECTRIC VEHICLE EMPLOYEE INCENTIVE22
20 CHARGE AHEAD.....22
21 KEEPING CURRENT AND KEEPING COOL PROGRAM COSTS.....24
22 INCOME ELIGIBLE WEATHERIZATION ASSISTANCE PROGRAM COSTS24
23 RENEWABLE ENERGY STANDARD AAO25
24 RENEWABLE ENERGY STANDARD RATE ADJUSTMENT MECHANISM.....26
25 COVID-19 REGULATORY ASSET AND AMORTIZATION.....29
26 EQUITY ISSUANCE AMORTIZATION30

1 A. Yes. Schedule KL-d1 attached to this testimony contains a list of cases and the
2 issues that I have addressed in testimony.

3 **EXECUTIVE SUMMARY**

4 Q. What is the purpose of your direct testimony?

5 A. My direct testimony will address Staff’s recommended adjustments for the
6 following issues: Capacity and Energy Sales, Purchased Power, Midcontinent Independent
7 System Operator (“MISO”) revenue and expense, MISO Transmission revenue and expense,
8 Southwest Power Pool (“SPP”) revenue and expense, Federal Energy Regulatory Commission
9 (“FERC”) Return on Equity (“ROE”) Complaint Cases, Emission Allowance and Renewable
10 Energy Credits, Rush Island Compensation, Property tax expense, Paperless Bill Credit costs,
11 Pay As You Save Program costs, Electric Vehicle Employee Incentive Program costs, Charge
12 Ahead Program costs, Keeping Current and Keeping Cool Program costs, Income Eligible
13 Weatherization Assistance Program costs, Renewable Energy Standard (“RES” Accounting
14 Authority Order (“AAO”), Renewable Energy Standard Rate Adjustment Mechanism
15 (“RESRAM”), COVID-19 Regulatory Asset and Amortization, and the Equity Issuance
16 Amortization.

17 Q. In this testimony, do you refer to regulatory concepts used to determine Staff’s
18 recommendations for expense and revenue levels for Ameren Missouri?

19 A. Yes. I used the regulatory concepts that include the test year and true up periods
20 and annualizations and normalizations in my testimony. These concepts are defined in the
21 direct testimony of Keith Majors.

22 Q. Do you use any additional regulatory concepts that are not defined in
23 Mr. Majors’ testimony?

1 A. Yes. I address regulatory assets and liabilities. When a utility is authorized to
2 track costs, the actual cost incurred of a particular item that is being tracked is compared to the
3 amount of that item currently included in the utility’s base rates. Any over-recovery of these
4 costs by the utility are included as a regulatory liability and returned to customers over an agreed
5 upon period of time. Under-recovery of these costs by the utility are included as a regulatory
6 asset and recovered by the utility over an agreed upon period of time.

7 Q. In this testimony, do you describe the development of a work product that was
8 provided to you by another Staff witness for the development of an issue?

9 A. Yes. Purchased power and off-system sales was provided by Staff witness
10 Shawn E. Lange, PE.

11 Q. In this testimony, do you provide any recommendations for the level of rate base
12 and/or expense to be reflected in the revenue requirement ordered in this case?

13 A. Yes. I recommend annualized or normalized amounts to include in the revenue
14 requirement for the following costs: Capacity and Energy Sales, Purchased Power,
15 Midcontinent Independent System Operator (“MISO”) revenue and expense, MISO
16 Transmission revenue and expense, Southwest Power Pool (“SPP”) revenue and expense,
17 Emission Allowance and Renewable Energy Credits, Property tax expense, Paperless Bill
18 Credit costs, Pay As You Save Program costs, Electric Vehicle Employee Incentive Program
19 costs, Charge Ahead Program costs, Renewable Energy Standard (“RES”) Accounting
20 Authority Order (“AAO”), Renewable Energy Standard Rate Adjustment Mechanism
21 (“RESRAM”), COVID-19 Regulatory Asset and Amortization, and the Equity Issuance
22 Amortization.

1 Q. In this testimony, do you provide any recommendations that should be
2 specifically reflected in the Commission's Report and Order in this case?

3 A. Yes. It is my recommendation that a base level for property tax expense is set
4 using the actual 2022 property taxes paid by Ameren Missouri. The 2022 base level will be
5 used to track property taxes paid by Ameren Missouri following the effective date of rates in
6 this case.

7 **CAPACITY AND ENERGY SALES**

8 *a. Capacity Sales*

9 Q. What are capacity sales?

10 A. When Ameren Missouri has excess capacity it is able to sell a portion of its
11 generation capacity to other utility companies. All other things being equal, capacity sales to
12 other utilities reduces Ameren Missouri's cost of service. Capacity that Ameren Missouri is
13 unable to sell through independent contracts with other utilities is sold through the MISO¹
14 planning resource auction ("PRA"). The PRA occurs on an annual basis from June to May each
15 year. As a result, Ameren Missouri's capacity revenues change each year as of June 1 as that
16 date coincides with the start of the next planning year.

17 Q. What is the purpose of the MISO PRA?

18 A. The purpose of the MISO PRA is to ensure MISO has sufficient planning
19 resources in each Local Resource Zone². After independent contracts are met, Ameren
20 Missouri clears all remaining available generation remaining in each planning year's PRA. The
21 capacity which satisfies the requirements as set by MISO is a fixed annual volume.

¹ MISO is a Regional Transmission Operator ("RTO").

² A geographic area within the MISO region. Ameren Missouri is in Zone 5. MISO Tariff.

1 Q. What is Staff's recommendation for capacity revenues?

2 A. Ameren Missouri's capacity is fixed based on MISO's capacity planning year
3 (June-May). Although the plan year is fixed, the revenues fluctuate from one plan year to the
4 next. Consequently, Staff normalized capacity sales based on contracts and MISO sales using
5 the last three plan years of 2020-2021, 2021-2022, and 2022-2023.

6 ***b. Energy Sales***

7 Q. What are energy sales?

8 A. Sales of electricity on the MISO market are made after Ameren Missouri has
9 met all obligations to serve its native load customers, both retail and wholesale. These sales
10 represent the net of gross proceeds and the associated cost of generation and purchased power
11 and are referred to as off-system sales.

12 Q. Why are these sales included in Ameren Missouri's cost of service?

13 A. It is appropriate to include the revenues earned from energy sales in the cost of
14 service because the facilities used in generating the electricity sold are paid for by ratepayers,
15 as is the electricity purchased in order to meet Ameren Missouri's native load.

16 Q. How are energy sales revenues calculated?

17 A. Energy sales revenues are calculated in Staff's production cost model and
18 determined by Staff witness Shawn E. Lange, PE. Staff's accounting schedules reflect the
19 annualized energy sales revenue as calculated by Staff witness Shawn E. Lange, PE using
20 Staff's production cost model.

21 Q. Does Staff intend to update energy sales revenue during the true up phase of
22 this case?

1 A. Yes. Staff will update these revenues through the true up period, December 31,
2 2022.

3 **PURCHASED POWER**

4 Q. What is purchased power?

5 A. Purchased power energy charges represent the energy Ameren Missouri
6 purchases on the spot market and through contracts to meet the system load requirement of its
7 electric customers. Staff witness Shawn E. Lange, PE is responsible for the output of the
8 production cost model that includes purchased power.

9 Q. How did Staff calculate the energy portion of purchased power costs?

10 A. Staff's annualized purchased power energy charges are based on the output of
11 Staff's production cost model results.

12 Q. Does Staff intend to update these costs during the true up phase of this case?

13 A. Yes. Staff will update these costs through the true up period, December 31,
14 2022.

15 **MIDCONTINENT INDEPENDENT SYSTEM OPERATOR COSTS**

16 *a. MISO Capacity Expense*

17 Q. What are capacity charges?

18 A. Similar to capacity revenue previously discussed, MISO utilizes an annual
19 resource adequacy method to determine the amount of capacity charged to Ameren Missouri.
20 To meet MISO's capacity planning requirement during each planning year (June-May), Ameren

1 Missouri utilizes “self-scheduling”³ for capacity offers and purchases as opposed to using a
2 Fixed Resource Adequacy Plan⁴ (“FRAP”), which must be used in retail choice states, such as
3 Illinois. With self-scheduling, all capacity is offered and purchased in the MISO auction. The
4 capacity expense for the entire plan year is fixed as a result of the MISO planning resource
5 auction for the plan year.

6 Q. How does FRAP differ from self-scheduling?

7 A. Unlike self-scheduling when all capacity is offered and purchased in the MISO
8 auction, only capacity in excess of demand and the reserve requirement is offered using the
9 FRAP method.

10 Q. What is Staff’s recommendation for capacity expense?

11 A. Ameren Missouri’s capacity is fixed based on MISO’s capacity planning year
12 (June-May). Although the plan year is fixed, the expenses fluctuate from one plan year to the
13 next. Consequently, Staff normalized capacity expense based on current contracts and capacity
14 expense incurred from MISO using the last three plan years of 2020-2021, 2021-2022, and
15 2022-2023.

16 ***b. MISO Day 2 Revenues and Expenses***

17 Q. Please explain MISO’s Day 2 market.

³ Midcontinent Independent System Operation Tariff Definition: Self Schedule: The designation by a Market Participant of a specific amount of Energy and/or Operating Reserve and/or capacity to be supplied from a specific Resource or Planning Resource as a Price Taker.

⁴ Midcontinent Independent System Operation Tariff Definition: Fixed Resource Adequacy Plan: A plan submitted by an Load Serving Entity (“LSE”) through the Module E Capacity Tracking Tool (“MECT”) to the Transmission Provider that is approved by the Transmission Provider which demonstrates that the LSE has sufficient Zonal Resource Credits (“ZRCs”) to meet all or part of its Planning Reserve Margin Requirement (“PRMR”) for one or more Local Resource Zones (“LRZs”).

1 A. Ameren Missouri participates in MISO’s Day 2 market that includes day-ahead
2 and real-time energy markets. Essentially Ameren Missouri buys and sells power in the Day 2
3 Market.

4 Q. For purposes of this testimony, what type of revenues does Ameren Missouri
5 receive from the MISO Day 2 market?

6 A. Ameren Missouri receives payments from MISO related to the Revenue
7 Sufficiency Guarantee⁵ (“RSG”) provision of MISO’s tariff.

8 Q. Define RSG.

9 A. RSG payments are determined hourly and are designed to ensure that companies
10 participating in the MISO Day 2 markets are made whole when utilities’ total energy offer
11 prices in the market are not covered by the actual market price. MISO Day 2 revenue is purely
12 energy market related and is not affected by changes in load.

13 Q. How do the MISO Day 2 expenses differ from MISO Day 2 revenue?

14 A. MISO Day 2 expenses are based on the amount of energy settled at the
15 “AMMO.UE” Commercial Pricing Node. These offer prices include a margin for profits.

16 Q. What is the current profit margin and how is it treated?

17 A. Currently, Staff is utilizing a 74.20% profit margin rate based on the calculations
18 of margins embedded in the RSG make whole payments during the 12 month period ending
19 March 31, 2022.

⁵ Midcontinent Independent System Operation Tariff Definition: Day-Ahead Sufficiency Credit: A resource credit guaranteed by the Transmission Provider ensuring the minimum recovery of the production cost and operating reserve cost of a resource that has been committed and scheduled by the Transmission Provider in the Day-Ahead Energy and Operating Reserve Market.

Real-Time Revenue Sufficiency Guarantee Credit: A resource credit guaranteed by the Transmission Provider ensuring the minimum recovery of the production cost and operating reserve cost of a resource that has been committed and scheduled by the Transmission Provider in the Real-Time Energy and Operating Reserve Market.

1 Q. What type of MISO Day 2 Market expense does Ameren Missouri incur?

2 A. Examples of MISO Day 2 expense include but are not limited to transmission
3 line losses, demand response and revenue neutrality uplift charges.

4 Q. What is Staff's recommendation for MISO Day 2 revenue and expense?

5 A. Staff recommends an annualized level of both revenue and expense through
6 March 31, 2022.

7 Q. Does Staff intend to update these costs during the true up phase of this case?

8 A. Staff will re-examine the level of MISO Day 2 revenue and expense as part of
9 its true-up audit using data through December 31, 2022.

10 **RUSH ISLAND SYSTEM SUPPORT RESOURCE ("SSR") COMPENSATION**

11 Q. Explain the Rush Island SSR compensation.

12 A. On August 19, 2022, MISO filed a SSR agreement for the Rush Island
13 generating station with the Federal Energy Regulatory Commission. The agreement was
14 between MISO and Ameren Missouri. On August 25, 2022, Ameren Missouri filed for
15 additional compensation for the Rush Island units. On October 24, 2022 the FERC approved
16 the agreement with an effective date of September 1, 2022.⁶

17 Q. What is an SSR?

18 A. Under the MISO tariff, market participants must submit a notice to MISO when
19 there is a change in status of a resource. As a market participant, Ameren Missouri notified
20 MISO of the future retirement of the Rush Island generating station. Once notified, MISO
21 performs a study to determine whether all or a portion of the resource's capacity is necessary

⁶ FERC Order Accepting Filings, issued October 24, 2022, Docket Nos ER22-2691-000 and ER22-2692-000.

1 to maintain system reliability. If MISO determines that the resource is needed for reliability,
2 an SSR agreement between MISO and the market participant is filed with the FERC.

3 Q. Are there costs associated with the FERC's approval of the SSR?

4 A. Yes. Beginning September 1, 2022, Load Serving Entities ("LSE") that benefit
5 from the operation of the SSR units are compensated based on MISO's approved cost allocation
6 procedure.

7 Q. Has Ameren Missouri received compensation related to the Rush Island SSR?

8 A. Based on discussions with Ameren Missouri personnel, Ameren Missouri
9 received its first payment from MISO in November 2022 for September 2022.

10 Q. What is Staff's recommendation for the SSR compensation related to Rush
11 Island?

12 A. Staff continues to evaluate the costs related to the Rush Island SSR. In this case,
13 Staff's update period is June 30, 2022. Since the payments Ameren Missouri will receive from
14 MISO are after this date, Staff will make a recommendation regarding the SSR compensation
15 during the true-up phase of this case.

16 **MISO TRANSMISSION REVENUE AND EXPENSE**

17 *a. MISO Transmission Expense*

18 Q. Explain the types of transmission charges Ameren Missouri receives from
19 MISO.

20 A. As a transmission customer of MISO the most significant charges Ameren
21 Missouri incurs from MISO are Multi-Value projects ("MVP"). These projects accounted for
22 64% of Ameren Missouri's total transmission expense during the test year period ending
23 March 31, 2022.

1 Q. What are MVP's?

2 A. MVP's are regional projects that originally began as reliability projects and have
3 since developed into market efficiency projects. When determining the costs for the next year,
4 MISO will estimate a total "revenue requirement" early each year. In September or October of
5 the year prior to the new MISO rates being put into effect, the individual Transmission Owners⁷
6 will estimate what their individual cost allocation responsibility for the total MISO revenue
7 requirement costs will be regarding MVP's. The new rate for these projects goes into effect
8 in January each year. Transmission customers are then billed their allocated share of the
9 MVP projects.

10 Q. What did Staff analyze to determine an appropriate level of transmission
11 expense for Ameren Missouri?

12 A. Staff analyzed Ameren Missouri actual transmission expenses for the period of
13 January 2018 through June 2022 and found that Ameren Missouri's transmission expense has
14 increased every year. A primary driver of the increase is MISO's 26A transmission charges.

15 Q. What is Staff's recommendation for Ameren transmission expense incurred
16 from MISO?

17 A. As a result of the continued upward trend for transmission expense, Staff
18 recommends an annualized level based on Staff's update period June 30, 2022.

19 Q. Does Staff intend to update these costs during the true up phase of this case?

20 A. Staff will re-examine the level of transmission expense as part of its true-up audit
21 using data through December 31, 2022.

⁷ Midcontinent Independent System Operation Tariff Definition: Each member of the ISO whose transmission facilities (in whole or in part) make up the Transmission Provider Transmission System.

1 ***b. MISO Transmission Revenue***

2 Q. Please explain transmission revenue.

3 A. Ameren Missouri receives revenue from MISO for the following MISO
4 Schedules:

- 5 • Schedule 1: Scheduling, System Control, and Dispatch
- 6 • Schedule 2: Reactive Supply and Voltage Control
- 7 • Schedule 7&8: Basic Transmission Revenue
- 8 • Schedule 26, 37&38: Network Upgrade Charge
- 9 • Schedule 9: Network Transmission Service
- 10 • Schedule 11: Distribution Facilities Charge

11 Q. What did Staff review to determine the level of transmission revenue and to
12 include in Ameren Missouri's cost of service in this case?

13 A. Staff reviewed actual historical transmission revenue for the period of
14 January 2018-June 2022.

15 Q. What is Staff's recommendation for Ameren transmission revenue received
16 from MISO?

17 A. As a result of the continued upward trend for transmission revenue, Staff
18 recommends an annualized level based on Staff's update period June 30, 2022.

19 Q. Does Staff intend to update these costs during the true up phase of this case?

20 A. Staff will re-examine the level of transmission revenue as part of its true-up audit
21 using data through December 31, 2022.

22 ***c. Ancillary Services Market Revenue and Expense***

23 Q. Please explain MISO's ancillary services market.

24 A. Ancillary services are services that are necessary to support capacity and
25 transmission of energy from resources to loads while maintaining reliable operation of the

1 MISO transmission system. Ancillary service types include regulation, spinning and
2 supplemental reserves.

3 Q. What did Staff review to determine the level of ancillary services revenue and
4 expense to include in Ameren Missouri's cost of service in this case?

5 A. Staff reviewed actual historical ancillary revenue and expense for the period of
6 January 2018-June 2022.

7 Q. What is Staff's recommendation for MISO ancillary services incurred by
8 Ameren Missouri?

9 A. Staff recommends an annualized level based on the test year period, 12 months
10 ending March 31, 2022.

11 Q. Does Staff intend to update these costs during the true up phase of this case?

12 A. Staff will re-examine the level of ancillary revenue and expense as part of its
13 true-up audit using data through December 31, 2022.

14 **SOUTHWEST POWER POOL ENERGY REVENUE AND EXPENSE**

15 Q. Please explain Southwest Power Pool ("SPP") energy revenue and expense.

16 A. Ameren Missouri's Atchison wind facility is located in northwest Missouri and
17 is located in the SPP. Similar to MISO, SPP is a RTO. Since this facility is located in SPP,
18 Ameren Missouri incurs energy revenue and expense beginning when the facility was placed
19 in service in 2021.

20 Q. What type of costs does Ameren Missouri incur from SPP?

21 A. Examples of the type of costs Ameren Missouri incurs from SPP include but are
22 not limited to revenue neutrality uplift charges, revenue sufficiency guarantee payments,
23 ancillary service charges, and administrative fees.

1 Q. What did Staff review to determine the level of SPP revenue and expense to
2 include in Ameren Missouri's cost of service in this case?

3 A. Staff reviewed actual historical SPP revenue and expense beginning when the
4 facility was placed in service through June 2022.

5 Q. What is Staff's recommendation for SPP revenue and expense incurred by
6 Ameren Missouri?

7 A. Staff recommends an annualized level based on Staff's update period June 30,
8 2022.

9 Q. Does Staff intend to update these costs during the true up phase of this case?

10 A. Staff will re-examine the level of SPP revenue and expense as part of its true-up
11 audit using data through December 31, 2022.

12 **FERC ROE COMPLAINT CASES**

13 Q. Please explain the Federal Energy Regulatory Commission ("FERC") Return on
14 Equity ("ROE") complaint cases.

15 A. Beginning in 2013, MISO Transmission Owners' return on common equity of
16 12.38% was the subject of several FERC complaint proceedings.⁸ These complaint cases
17 challenged the allowed base return on common equity for MISO Transmission Owners.

18 Q. How was the FERC ROE complaints issue resolved in Case No. ER-2021-0240?

⁸ Case No. ER-2019-0335, Staff Cost of Service Report pages 63-65 and Case No. ER-2021-0240, Staff Cost of Service Report pages 182-183.

1 A. As part of the Unanimous Stipulation and Agreement,⁹ the parties agreed that
2 Ameren Missouri continue its regulatory liability until the conclusion of the litigation and the
3 refunds were finalized.

4 Q. Are the FERC ROE complaint cases resolved?

5 A. No.

6 Q. What is Staff's recommendation for the FERC ROE refunds in this case?

7 A. Staff recommends that Ameren Missouri continue the regulatory liability until
8 the litigation is completed, similar to the agreement in Case No. ER-2021-0240.

9 **EMISSION ALLOWANCE AND RENEWABLE ENERGY CREDITS**

10 Q. Define emission allowances.

11 A. Emission allowances are distributed to utilities (and other industries) as part of
12 a cap and trade system which is designed to limit pollution emissions.

13 Q. Define cap and trade.

14 A. The cap on greenhouse gas emissions is a firm limit on pollution. An emission
15 allowance authorizes a utility to emit one ton of emissions during a given compliance period.
16 Emission allowances are a fully marketable commodity and as such, can be bought, sold, or
17 banked for future use.

18 Q. What federal agency administers the emission allowance cap and trade system?

19 A. The Environmental Protection Agency administers this system as part of its Acid
20 Rain Program that was established under the 1990 Clean Air Act Amendment.

21 Q. Define renewable energy credits.

⁹ Case No. ER-2021-0240, *Unanimous Stipulation and Agreement* (G)(15), filed on November 24, 2021 and approved by the Commission on December 22, 2021.

1 A. Renewable Energy Credits (“RECs”) or Renewable Energy Certificate means a
2 tradable certificate that is either certified by an entity approved as an acceptable authority by
3 the Commission or as validated through the Commission’s approved REC tracking system or a
4 generator’s attestation. A REC represents that one megawatt-hour of electricity has been
5 generated from renewable energy resources.¹⁰

6 Q. What is Staff’s recommendation for emission allowances and RECs for Ameren
7 Missouri?

8 A. Historically, Ameren Missouri’s REC and emission balances have shown some
9 level of fluctuation. However, recently Ameren Missouri has not incurred any emission
10 allowances. Therefore, Staff has included in rate base a 13 month average of RECs that existed
11 between June 1, 2021 through June 30, 2022.

12 Q. Does Staff intend to update these costs during the true up phase of this case?

13 A. Staff will re-examine the level of emission allowance and renewable energy
14 credit as part of its true-up audit using data through December 31, 2022.

15 **PROPERTY TAX EXPENSE**

16 Q. Please describe property tax expense.

17 A. Property tax expense is taxes paid on property owned by individuals or
18 businesses. Ameren Missouri property taxes are based (assessed) on the property it owns on
19 January 1 of each year. The amount paid by Ameren Missouri is based on the assessment and
20 the tax rate (levy) set by the taxing authority and is due December 31.

¹⁰ 20 CSR 4240-20.100 Electric Utility Renewable Energy Standard Requirements (1)(M).

1 Q. Did Staff review Ameren Missouri property tax assessed values and property tax
2 rates?

3 A. Yes. Staff reviewed the assessed values, property tax rates and the amount of
4 property taxes paid by Ameren Missouri for the calendar year 2020 and 2021.

5 Q. What is Staff's recommendation for an annualized level of Missouri property
6 taxes?

7 A. Ameren Missouri's property taxes increased in 2021 when compared to 2020
8 property taxes. Staff recommends an annualized level of Missouri property taxes for Ameren
9 Missouri based on actual property taxes paid in 2021.

10 Q. Did Staff propose any additional adjustments for Ameren Missouri property
11 taxes?

12 A. Yes. Staff made an adjustment to eliminate the property taxes related to the
13 Meramec Energy Center. Meramec Energy Center was retired in December 2022. As described
14 above, property taxes are based on property owned by Ameren Missouri as of January 1 each
15 year. Since the Meramec Energy Center retired before the assessment date of January 1, 2022,
16 an adjustment to eliminate the property taxes related to this facility is necessary.

17 A. Does Staff intend to true up Ameren Missouri's property taxes?

18 Q. Yes. Staff intends to reflect Ameren Missouri's actual 2022 property taxes less
19 the property taxes related to the Meramec Energy Center in Staff's true up accounting schedules
20 that will be filed with its surrebuttal and true up testimony on March 13, 2022.

21 Q. Is Staff aware of the new property tax legislation and if so, how did Staff
22 implement the new legislation?

1 A. Yes. Property tax legislation was passed by the Missouri General Assembly and
2 signed by the Governor on June 29, 2022 and became law effective on August 28, 2022. The
3 new legislation, Senate Bill 745, amended Section 393.400 states:

4 Electrical corporations, gas corporations, sewer corporations and water
5 corporations shall defer to a regulatory asset or liability account any
6 difference in state or local property tax expenses actually incurred, and
7 those on which the revenue requirement used to set rates in the
8 corporation's most recently completed general rate proceeding was
9 based. The regulatory asset or liability account balances shall be included
10 in the revenue requirement used to set rates through an amortization over
11 a reasonable period of time in such corporation's subsequent general rate
12 proceedings. The commission shall also adjust the rate base used to
13 establish the revenue requirement of such corporation to reflect the
14 unamortized regulatory asset or liability account balances in such general
15 rate proceedings. Such expenditures deferred under the provisions of
16 this section are subject to commission prudence review in the next
17 general rate proceeding after deferral.

18 Q. What is Staff's position regarding the property tax base amount and when
19 Ameren Missouri will begin deferring property taxes?

20 A. As previously discussed, Staff intends to true up property taxes through
21 December 31, 2022. Staff recommends establishing the base property tax level for the property
22 tax tracker on 2022 actual property taxes paid by Ameren Missouri. Property taxes incurred by
23 Ameren Missouri after the effective date of rates in this case will be deferred into a regulatory
24 asset, including any successful appeals. In Ameren Missouri's next general rate case the
25 deferred balance will be compared to the base level established in this case, 2022 actual property
26 taxes paid by Ameren Missouri.

27 **PAPERLESS BILL CREDIT**

28 Q. Please explain Ameren Missouri's paperless bill credit.

1 A. In Case No. ER-2019-0335, Ameren Missouri proposed a \$0.50 paperless bill
2 credit each month for a 12 month period for customers who signed up for paperless billing.
3 As part of the Stipulation and Agreement filed in that case, the parties agreed that Ameren
4 Missouri could offer the bill credit, however Ameren Missouri would not seek any recovery of
5 the incentives or costs directly associated with paperless billing. Additionally, the credits were
6 to be excluded from the revenues used to determine the revenue requirement in the next general
7 rate case.¹¹

8 Q. How did Ameren Missouri and Staff treat the paper bill credit in Case No.
9 ER-2021-0240, Ameren Missouri's subsequent general rate case?

10 A. Ameren Missouri continued to support the paperless bill credit consistent with
11 its proposal in Case No. ER-2019-0335.¹² Staff made an adjustment to eliminate the costs
12 consistent with the Stipulation and Agreement in Case No. ER-2019-0335.

13 Q. What is Ameren Missouri proposing for the paperless bill credit in this case?

14 A. Ameren Missouri is proposing to cease enrollment of the paperless bill credit on
15 the effective date of rates in the current preceding.

16 Q. Is Staff supportive of this proposal?

17 A. Yes.

18 Q. How did Staff treat the costs related to the paperless bill credit in this case?

19 A. Staff made an adjustment to eliminate the costs that Ameren Missouri recorded
20 in the test year, 12 months ending March 31, 2022.

¹¹ Case No. ER-2019-0335, *Corrected Non-Unanimous Stipulation and Agreement*, paragraph 47. Approved by the Commission on March 18, 2020.

¹² Case No. ER-2019-0335, Direct Testimony, Marc C. Birk, pages 3-5.

1 **PAY AS YOU SAVE**

2 Q. Please explain Pay as You Save (“PAYS®”) program costs.

3 A. In Case No. EO-2018-0211 the Commission approved a *Unanimous Stipulation*
4 *and Agreement Regarding The Implementation [sic] Certain MEEIA Programs Through Plan*
5 *Year 2022* allowing Ameren Missouri to operate a PAYS® program as part of the Missouri
6 Energy Efficiency Investment Act (“MEEIA”).¹³ The program allows Ameren Missouri to
7 offer financing to eligible customers for energy efficiency upgrades. The participants are
8 charged a 4% financing fee on their bill, while non-participants are charged the difference
9 between pre-tax Plant-In-Service Account rate and the 4% financing cost until the regulatory
10 asset is moved into base rates.

11 Q. What is the purpose of the PAYS® program?

12 A. The purpose of the PAYS® program is to promote the installation of energy
13 efficient measures and increase deeper, long-term energy savings and bill reduction
14 opportunities for participants.¹⁴

15 Q. How long will the participant be charged for the monthly service charge?

16 A. The monthly service charge will remain on a participant’s bill until Ameren
17 Missouri recovers all the costs associated with the installation of the equipment, not to exceed
18 twelve years.

19 Q. Does Ameren Missouri recover any costs associated with the PAYS® program
20 in its MEEIA rider?

¹³ Case No, EO-2018-0211, *Unanimous Stipulation and Agreement Regarding The Implementation [sic] Certain MEEIA Programs Through Plan Year 2022*, approved August 5, 2020.

¹⁴ Union Electric Company Tariff, Sheet No. 245.

1 A. Yes. Ameren Missouri recovers the difference between the 4% financing cost
2 and their pre-tax Plant-In-Service Accounting rate through the MEEIA rider. This cost is
3 recovered in the MEEIA rider, beginning when a participant initiates the installation of the
4 equipment until the costs are included in base rates. Once the cost is included in base rates, it
5 is no longer recoverable through the MEEIA.

6 Q. What types of costs are included in the PAYS® program and how are they
7 recorded by Ameren Missouri?

8 A. Ameren Missouri records the investment and financing charges in a regulatory
9 asset. The regulatory asset balance is included in rate base and recovered based on the weighted
10 useful life of the measures installed. This results in an annual amortization of approximately
11 11 years. This is consistent with the PAYS® program offered by other Missouri utilities.

12 Q. Please explain Staff's recommendation for PAYS® program costs.

13 A. Staff included the regulatory asset associated with these costs in rate base and
14 included an annual amortization expense based on an amortization period consistent with the
15 weighted useful life of the measures installed. Staff's adjustment is reflected in Staff's
16 Accounting schedule 2-Rate Base and schedule 10.

17 Q. Did Staff include any revenues related to the PAYS?

18 A. Yes. Staff annualized the revenues Ameren Missouri receives from its customers
19 under the PAYS program through June 30, 2022.

20 Q. Does Staff intend to update these costs during the true up phase of this case?

21 A. Staff will re-examine the level of PAYS program cost as part of its true-up audit
22 using data through December 31, 2022.

1 **ELECTRIC VEHICLE EMPLOYEE INCENTIVE**

2 Q. Please explain Ameren Missouri's electric vehicle employee incentive program.

3 A. ** [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED] **

7 Q. How did Staff treat Ameren Missouri's electric vehicle incentive program costs?

8 A. The incentives offered to Ameren Missouri employees to purchase or lease an
9 electric vehicle do not provide a benefit to its customers. Consequently, Staff made an
10 adjustment to remove the incentive payments that were charged to Ameren Missouri during the
11 test year, 12 months ending March 31, 2022.

12 **CHARGE AHEAD**

13 Q. Please explain Ameren Missouri's Charge Ahead Program.

14 A. In Case No. ET-2018-0132 Ameren Missouri filed an application seeking to
15 approve new tariffed programs that were referred to as "Charge Ahead". The Charge Ahead
16 program included four sub-programs that included corridor charging, multi-family charging,
17 public charging, and workplace charging. In its order issued on February 6, 2019, the
18 Commission approved the corridor charging sub program and allowed for deferral accounting
19 for the program costs. After further discussions with the parties a second stipulation was filed
20 on August 19, 2019 and approved by the Commission on October 17, 2019. The second
21 stipulation allowed Ameren Missouri to implement the remaining three sub-programs,
22 multi-family charging, public charging, and workplace charging.

23 Q. What is the approved budget for Ameren's Charge Ahead program?

1 A. In Case No. ET-2018-0132, the Commission approved a total budget of
2 \$4.4 million in its Report and Order for the corridor charging sub-program and approved a
3 budget of \$6.6 million for the sub-programs multi-family charging, public charging, and
4 workplace charging.

5 Q. Is Ameren Missouri within the approved budgets for the Charge Ahead
6 program?

7 A. Yes. Ameren Missouri has spent \$5,298,989 for the period of December 2019
8 through June 2022.

9 Q. Is Ameren Missouri currently recovering costs for the Charge Ahead program?

10 A. Yes. In Case No. ER-2021-0240 the Commission approved a *Unanimous*
11 *Stipulation and Agreement* that included an annual amortization of the Charge Ahead program
12 costs that Ameren Missouri incurred for the period of December 2019 through
13 September 2021.¹⁵ This resulted in an annual amortization of \$615,671.

14 Q. What is Staff's recommendation for the Charge Ahead program costs?

15 A. Staff has included the annual amortization established in Case No.
16 ER-2021-0240 and recommends a seven year amortization of the Charge Ahead program costs
17 for the period of October 1, 2021 through June 30, 2022. This results in an annual amortization
18 of \$141,327.

19 Q. Does Staff intend to update these costs during the true up phase of this case?

20 A. Staff will re-examine the level of Charge Ahead program costs as part of its
21 true-up audit using data through December 31, 2022.

¹⁵ Case No. ER-2021-0240, *Unanimous Stipulation and Agreement*, approved by the Commission on December 22, 2021.

1 **KEEPING CURRENT AND KEEPING COOL PROGRAM COSTS**

2 Q. Please explain Ameren Missouri “Keeping Current” and “Keeping Cool”
3 program.

4 A. The Keeping Current and Keeping Cool programs provides electric bill payment
5 assistance to Ameren Missouri low-income customers.

6 Q. What is the current funding level for these programs?

7 A In Case No. ER-2021-0240, the Commission approved a *Unanimous Stipulation*
8 *and Agreement*.¹⁶ The combined funding, approved by the Commission, for the Keeping
9 Current and Keeping Cool is \$4 million annually, split equally between customers and the
10 Company shareholders.

11 Q. Did Staff make any adjustments to the Keeping Current and Keeping Cool costs
12 recorded by Ameren Missouri?

13 A. Yes. Staff made an adjustment to the costs to be consistent with the terms in the
14 Stipulation and Agreement in Case No. ER-2021-0240.

15 **INCOME ELIGIBLE WEATHERIZATION ASSISTANCE PROGRAM COSTS**

16 Q. Explain the Low Income Eligible Weatherization Assistance Program
17 (“LIWAP”).

18 A. LIWAP provides eligible households with home energy conservation services.
19 The program provides cost-effective, energy-efficient home improvements to Missouri’s
20 low-income households, especially the elderly, children, those with physical disadvantages, and
21 others most affected by high utility costs.

¹⁶ Case No. ER-2021-0240, *Unanimous Stipulation and Agreement (K)(20)*, approved by the Commission on December 22, 2021.

1 Q. What types of services are offered in this program?

2 A. Typical weatherization measures include air sealing to reduce infiltrations, attic
3 insulation, sidewall insulation, floor and foundation insulation, pipe or duct insulation, water
4 heater blankets, energy efficient lighting replacement, and heating and cooling system repair or
5 replacement.

6 Q. Did Staff make any adjustments to the LIWAP costs recorded by Ameren
7 Missouri?

8 A. No. Staff confirmed the test year balance for the LIWAP program is consistent
9 with the current annual authorized level of \$1.2 million.

10 **RENEWABLE ENERGY STANDARD AAO**

11 Q. Please explain the Renewable Energy Standard (“RES”) Accounting Authority
12 Order (“AAO”) regulatory deferral rate mechanism.

13 A. In Case No. ER-2011-0028, the Commission granted Ameren Missouri an AAO
14 for RES Compliance costs.¹⁷ Since receiving approval to defer RES costs in this case, Ameren
15 Missouri has incurred costs that consist of items such as customer and non-customer solar
16 RECs¹⁸, wind RECs and related administrative costs along with the fuel costs associated with
17 the Maryland Heights Renewable Energy Center.

18 Q. Please describe the Maryland Height Renewable Energy Center.

19 A. The Maryland Height Renewable Energy Center began operation in 2012 and is
20 an 8MW facility where methane gas from the nearby landfill is used to power combustion

¹⁷ Case No. ER-2011-0028, *Commission Report and Order*, filed on July 13, 2011. Pages 95-101.

¹⁸ 20 CSR 4240-20.100 Electric Utility Renewable Energy Standard Requirements (1)(M).Renewable Energy Credit or Renewable Energy Certificate means a tradable certificate, that is either certified by an entity approved as an acceptable authority by the commission or as validated through the commission’s approved REC tracking system or a generator’s attestation.

1 turbine generators. Methane gas is considered a renewable resource for meeting Ameren
2 Missouri's required RES requirement. As such, the cost of the methane gas that Ameren
3 Missouri procures for operations is included in rates through its RES AAO deferral. In the
4 Stipulation and Agreement in Case No. EA-2018-0202, the parties agreed and the Commission
5 approved on October 24, 2018 that the methane gas costs remain in the RES AAO deferral.

6 Q. What did Staff review to determine the level of RES costs in this case?

7 A. As part of its audit in this rate proceeding Staff examined all applicable RES
8 costs incurred by Ameren Missouri during the period of September 30, 2021, the true up period
9 in Case No. ER-2021-0240, through June 30, 2022 and that are eligible for deferral and recovery
10 in the existing RES AAO regulatory deferral rate mechanism.

11 Q. What is Staff's recommendation for the RES AAO in this case?

12 A. Based on Staff's examination of the RES costs, Staff recommends a three-year
13 amortization of the regulatory asset balance with no rate base treatment. Staff's
14 recommendation for no rate base treatment is consistent with the Commission decision that
15 established the ongoing AAO treatment for deferred RES costs in Case No. ER-2012-0166.¹⁹

16 Q. Does Staff intend to update these costs during the true up phase of this case?

17 A. Staff will re-examine the regulatory asset balance as part of its true-up audit
18 using data through December 31, 2022.

19 **RENEWABLE ENERGY STANDARD RATE ADJUSTMENT MECHANISM**

20 Q. Please explain the Renewable Energy Standard Rate Adjustment Mechanism
21 ("RESRAM").

¹⁹ Case No. ER-2012-0166, Commission Report and Order, pages 50-56.

1 A. An electric utility may establish a RESRAM as part of the Renewable Energy
2 Standard (“RES”).²⁰ A RESRAM is a special ratemaking mechanism that allows Missouri
3 electric utilities to recover RES-related capital investment and expenses through a rider in
4 between general rate cases.

5 Q. When did Ameren Missouri first request a RESRAM?

6 A. Ameren Missouri requested a RESRAM in Case No. EA-2018-0202.

7 Q. Are all of Ameren Missouri’s RES costs recovered through the RESRAM?

8 A. No. As previously discussed, prior to the implementation of the RESRAM, the
9 Commission granted Ameren Missouri an AAO allowing deferral of RES costs that consist of
10 items such as customer and non-customer solar RECs, wind RECs and related administrative
11 costs along with the fuel costs associated with the Maryland Heights Renewable Energy Center.
12 Renewable costs incurred by Ameren Missouri prior to January 1, 2019, the effective date of
13 the RESRAM²¹, are recovered through the RES deferral.

14 Q. What did Staff review to determine the base level of RESRAM costs in this
15 case?

16 A. Staff has reviewed the historical levels of RESRAM eligible expenses through
17 June 30, 2022 to determine a base level of RESRAM expenses to include in the RESRAM base.
18 These include RECs purchased after January 1, 2019, solar rebates authorized in Section
19 393.1670, RSMo (Senate Bill 564), non-labor operations and maintenance and interconnection

²⁰ 20 CSR 4240-20.100 Electric Utility Renewable Energy Standard Requirements.

²¹ Case No. EA-2018-0202, *Order Approving Compliance Tariff*, filed December 19, 2018.

1 expenses for the Atchison and High Prairie Renewable Energy Centers²², insurance, and
2 property taxes.

3 Q. What is Staff's recommendation for each of these cost categories that are
4 included in the RESRAM?

5 A. Staff recommends the following for the base level of the RESRAM:

- 6 • RECs: 12 months ending June 30, 2022.
- 7 • Non-labor Operation and Maintenance ("O&M") Expense: 12 months
8 ending June 30, 2022.
- 9 • Solar Rebates: 12 months ending June 30, 2022.
- 10 • Property taxes: Actual property taxes paid December 2021.
- 11 • Insurance Expense: annualized level of insurance expense based on
12 current insurance policies for the wind facilities.
- 13 • Interconnection Costs: 12 months ending June 30, 2022.
- 14 • Production Tax Credits ("PTC"): Based on the results of Staff fuel
15 production model and the current PTC rate.
- 16 • Depreciation Expense: Based on Staff's proposed depreciation
17 expense for the wind facilities.
- 18 • Return on eligible plant: Based on net plant of eligible facilities and
19 Staff's recommended rate of return.

20 Q. Did Staff make additional adjustments related to the RESRAM?

21 A. Yes. Since the RESRAM is being rebased in this case, Staff made an adjustment
22 to remove the amortizations and revenues that were recorded in the test year, 12 months ending
23 March 31, 2022. Staff also made an adjustment to reflect wind non-labor maintenance based
24 on June 30, 2022.

25 Q. Does Staff intend to update these costs during the true up phase of this case?

²² The High Prairie Wind Facility was considered in service by Ameren Mission in December 2020. The facility consists of 175 wind turbines for an overall capacity of 400 MW. The Atchison Wind Facility was considered in service by Ameren Missouri in June 2021, with the exception of 1 wind turbine that was placed in service in the fourth quarter of 2021.

1 A. Staff will re-examine the RESRAM base as part of its true-up audit using data
2 through December 31, 2022.

3 **COVID-19 REGULATORY ASSET AND AMORTIZATION**

4 Q. Please provide the background of the Coronavirus Pandemic (“COVID”) AAO
5 Cost Recovery.

6 A. In the Non-Unanimous Stipulation and Agreement filed in Case No.
7 EU-2021-0027, which the Commission approved on March 10, 2021, the parties agreed to an
8 AAO in which Ameren Missouri was allowed to track and defer into a regulatory asset certain
9 costs associated with COVID beginning March 1, 2020 until March 31, 2021. In the subsequent
10 general rate case, ER-2021-0240, The Commission approved a *Unanimous Stipulation and*
11 *Agreement* that allows Ameren Missouri to recover these costs over a five-year period.
12 The approved annual amortization is \$1,747,232.²³

13 Q. Did Staff make an adjustment to be consistent with the Stipulation and
14 Agreement?

15 A. Yes. Staff made an adjustment to the test year balance to reflect the approved
16 annual amortization of \$1,747,232.

17 Q. Did Ameren Missouri propose an alternative amortization period for the
18 COVID-19 amortization in direct testimony?

19 A. Yes. Ameren Missouri witness Mitchell J. Lansford proposes a 3-year
20 amortization of the COVID-19 deferral.²⁴ However, Staff understands that the proposed 3-year

²³ Case No. ER-2021-0240, *Unanimous Stipulation and Agreement*, approved by the Commission on December 22, 2021, Exhibit D. The final balance of the deferred COVID costs are \$8,736,163 resulting in an annual amortization of \$1,747,232 based on five years.

²⁴ Case No. ER-2022-0337, Mitchell J. Lansford Direct Testimony, page 35, lines 18-20.

1 amortization was an error and that Ameren Missouri continues to support the 5-year
2 amortization approved by the Commission in Case No. ER-2021-0240.

3 **EQUITY ISSUANCE AMORTIZATION**

4 Q. Explain equity issuance costs.

5 A. Equity issuance costs are expenditures associated with issuing debt securities
6 and equity securities. Issuance costs include but may not be limited to audit fees, legal fees,
7 and the Securities & Exchange Commission registration fees.

8 Q. Has Ameren Missouri incurred costs associated with equity issuance?

9 A. Yes. In Case No. ER-2021-0240, Ameren Missouri proposed an adjustment to
10 recover equity issuance costs related to financing wind generation investments.²⁵

11 Q. Is Ameren Missouri currently recovering equity issuance costs related to
12 financing its wind generation investments as proposed in Case No. ER-2021-0240?

13 A. Yes. On December 22, 2021, The Commission approved a *Unanimous*
14 *Stipulation and Agreement* that allows Ameren Missouri to recover these costs over the life of
15 the wind generation facilities. The annual amortization for these costs is \$255,447.

16 Q. Did Staff make an adjustment to be consistent with the Stipulation and
17 Agreement?

18 A. Yes. Staff made an adjustment to the test year balance to reflect the approved
19 annual amortization of \$255,447.

20 Q. Does this conclude your direct testimony?

21 A. Yes, it does.

²⁵ Case No. ER-2021-0240, Mitchell Lansford Direct Testimony, page 37, lines 9-15.

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 Adjust)
Its Revenues for Electric Service) Case No. ER-2022-0337

AFFIDAVIT OF KAREN LYONS

STATE OF MISSOURI)
) ss.
COUNTY OF JACKSON)

COMES NOW KAREN LYONS and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Direct Testimony of Karen Lyons*; and that the same is true and correct according to her best knowledge and belief.

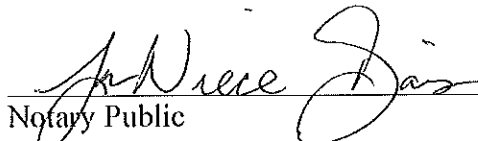
Further the Affiant sayeth not.



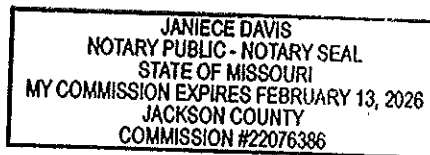
KAREN LYONS

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the City of Jackson, State of Missouri, at my office in Kansas City, on this 4th day of January 2023.



Notary Public



**Case Participation
of
Karen Lyons**

Year	Case/Tracking Number	Company Name	Type of Testimony/Issue
2023	ER-2023-0038 (pending)	Spire Missouri Certificate of Convenience and Necessity (CCN)	Staff Memorandum
2022	ER-2022-0337 (pending)	Ameren Missouri-General Rate Case	Direct: Property Taxes, Paperless Bill Credit, Electric Vehicle Incentive, , Charge ahead regulatory asset, PAYS, Income eligible, and Keeping current programs, RESRAM, Transmission Revenue and Expense, Capacity, Ancillary Services, RES Amortization, Emission Allowances, Meramec Tracker, COVID AAO amortization, Equity Issuance Costs, Time of Use Tracker, COLI normalization
2022	GR-2022-0179 (Stipulated)	Spire East and Spire West-General Rate Case	Direct: Property Taxes Rebuttal: Property Taxes Surrebuttal: Property Taxes
2022	GO-2022-0339 (Stipulated)	Spire East and Spire West Infrastructure System Replacement Surcharge (ISRS)	Staff Memorandum- Supervisory Oversight
2022	ER-2022-0129 (Partially Contested)	Evergy Missouri Metro-General Rate Case	Case Coordinator Direct: : SO2 Proceeds, Emission Allowances, Surveillance reporting, Off-System Sales, Greenwood Solar, Transmission Revenue, Wholesale Transmission Revenue Credit, Border Customers, Storm Reserve, Customer Education costs, Time of Use program costs, Pays Program, Ancillary Services, Transmission Congestion Rights, Revenue Neutral Uplift charges, Common Use Plant Billings Rebuttal: Maintenance Reserve, Storm Reserve, Surveillance Reports, Wholesale Revenue Credit Surrebuttal: Storm Reserve, Greenwood Solar, Surveillance Reports, Wholesale Revenue Credit, Revenue Neutral Uplift, Ancillary Services, Transmission Congestion Rights
2022	ER-2022-0130 (Partially Contested)	Evergy Missouri West-General Rate Case	Case Coordinator Direct: SO2 Proceeds, Emission Allowances, Surveillance reporting, Off-System Sales, Greenwood Solar, Transmission Revenue, Wholesale Transmission Revenue Credit, Border Customers, Storm Reserve, Customer Education costs, Time of Use program costs, Pays Program, Ancillary Services, Transmission Congestion Rights, Revenue Neutral Uplift charges, Common Use Plant Billings Rebuttal: Maintenance Reserve, Storm Reserve, Surveillance Reports, Wholesale Revenue Credit Surrebuttal: Storm Reserve, Greenwood Solar, Surveillance Reports, Wholesale Revenue Credit, Revenue Neutral Uplift, Ancillary Services, Transmission Congestion Rights
2022	GO-2022-0171 (Stipulated)	Spire East and Spire West Infrastructure System Replacement Surcharge (ISRS)	Staff Memorandum- Supervisory Oversight

Year	Case/Tracking Number	Company Name	Type of Testimony/Issue
2021	ER-2021-0240	Ameren Missouri-General Rate Case	Surrebuttal/True Up: Electric Vehicle Employee Incentive, Charge Ahead Program, Pay as You Save Program
2021	WA-2022-0049 and SA-2022-0050	Missouri American Certificate of Convenience and Necessity (CCN)	Staff Memorandum- Supervisory Oversight
2021	EA-2022-0043 (Stipulated)	Every Missouri Metro and Every Missouri West (CCN)	Staff Memorandum- Supervisory Oversight
2020-2021	GR-2021-0108 (Contested)	Spire Missouri-General Rate Case	Case Coordinator Direct: Propane Investment Natural Gas Inventories EnergyWise and Insulation Financing Programs St Peters Lateral Rebuttal: Research and Development Costs Surrebuttal: Propane Investment
2021	EO-2021-0032	Every Missouri Metro and Every Missouri West	Investigatory Docket –Elliott Management
2020	SA-2021-0074	Missouri American Water Company (Sewer) Certificate of Convenience and Necessity (CCN)	Staff Memorandum- Supervisory Oversight
2020	SA-2021-0017 (Contested)	Missouri American Water Company (Sewer) Certificate of Convenience and Necessity (CCN)	Staff Memorandum- Supervisory Oversight
2020	GO-2021-0031 (Stipulated)	Spire West-Infrastructure System Replacement Surcharge (ISRS)	Staff Memorandum
2020	GO-2021-0030 (Stipulated)	Spire West-Infrastructure System Replacement Surcharge (ISRS)	Staff Memorandum
2020	GA-2021-0010	Spire Missouri- Certificate of Convenience and Necessity (CCN)	Staff Memorandum- Supervisory Oversight
2020	WR-2020-0264 (Unanimous Disposition Agreement)	The Raytown Water Company (Water Rate Case)	Staff Memorandum- Supervisory Oversight
2020	WM-2020-0174	Liberty Utilities (Missouri Water) Acquisition	Staff Memorandum- Supervisory Oversight
2020	GO-2016-0332, GO-2016-0333 and GO-2017-0201, GO-2017-0202 (Remand Cases- Stipulated)	Spire Missouri- Infrastructure System Replacement Surcharge (ISRS)	Staff Memorandum-Refund calculation
2020	GO-2018-0309 and GO-2018-0310 (Remand Cases- Stipulated)	Spire Missouri- Infrastructure System Replacement Surcharge (ISRS)	Staff Direct Report-Refund calculation
2020	GO-2020-0230 (Stipulated)	Spire West-Infrastructure System Replacement Surcharge (ISRS)	Staff Memorandum Direct: Income Taxes

Year	Case/Tracking Number	Company Name	Type of Testimony/Issue
2020	GO-2020-0229 (Stipulated)	Spire East-Infrastructure System Replacement Surcharge (ISRS)	Staff Memorandum Direct: Income Taxes
2020	GA-2020-0251	Summit Natural Gas of Missouri (CCN)	Staff Memorandum- Supervisory Oversight
2020	SM-2020-0146	Elm Hills Utility Operating Company (Acquisition)	Staff Memorandum
2019	GA-2020-0105	Spire Missouri, Inc Certificate of Convenience and Necessity (CCN)	Staff Memorandum- Supervisory Oversight
2020	ER-2019-0374	Empire District Electric Company (Electric Rate Case)	CWC- Supervisory Oversight
2019-2020	ER-2019-0335 (Stipulated)	Union Electric Company, d/b/a Ameren Missouri (Electric Rate Case)	Direct: Cloud Computing, Electric Vehicle Employee Incentive, Charge Ahead Program Rebuttal: Cloud Computing, Paperless Bill Credit, Time of Use Pilot Tracker
2019	WA-2019-0364 and SA-2019-0365 (Proceedings Stayed)	Missouri American Water Company (CCN)	Supervisory Oversight
2019	WA-2019-0366 and SA-2019-0367 (Dismissed)	Missouri American Water Company (CCN)	Supervisory Oversight
2019	GO-2019-0357 (Contested)	Spire West-Infrastructure System Replacement Surcharge (ISRS)	Staff Memorandum Direct: Income Taxes
2019	GO-2019-0356 (Contested)	Spire East-Infrastructure System Replacement Surcharge (ISRS)	Staff Memorandum Direct: Income Taxes
2019	WO-2019-0184 (Contested)	Missouri American Water Company (ISRS)	Staff Memorandum Direct: Net Operating Loss Rebuttal: Net Operating Loss
2019	SA-2019-0161	United Services, Inc (CCN)	Staff Memorandum
2019	SA-2019-0183	Missouri American Water Company (CCN)	Staff Memorandum
2018	ER-2018-0145 (Stipulated)	Kansas City Power & Light Company (Electric Rate Case)	Direct: Greenwood Solar, Cash Working Capital, Transmission Revenue, Ancillary Services, Transmission Congestion Rights, Revenue Neutral Uplift charges, Off System Sales, Missouri Iowa Nebraska Transmission Line Losses, IT Software, Insurance, Injuries and Damages, Common Use Plant Billings, Income Taxes, Kansas City earning tax, ADIT, TCJA impacts Rebuttal: Injuries and Damages, Sibley and Montrose O&M Surrebuttal: Greenwood Solar, Injuries and Damages, Kansas City Earnings Tax, Income Taxes

Year	Case/Tracking Number	Company Name	Type of Testimony/Issue
2018	ER-2018-0146 (Stipulated)	KCP&L Greater Missouri Operations Company (Electric Rate Case)	<p>Direct: Greenwood Solar, Cash Working Capital, Transmission Revenue, Ancillary Services, Transmission Congestion Rights, Revenue Neutral Uplift charges, Off System Sales, Missouri Iowa Nebraska Transmission Line Losses, IT Software, Insurance, Injuries and Damages, Common Use Plant Billings, Income Taxes, Kansas City earning tax, ADIT, TCJA impacts</p> <p>Rebuttal: Injuries and Damages, Sibley and Montrose O&M</p> <p>Surrebuttal: Greenwood Solar, Injuries and Damages, Kansas City Earnings Tax, Income Taxes</p>
2017	GR-2017-0215 and GR-2017-0216-Contested	Laclede Gas and Missouri Gas Energy (Gas Rate Case)	<p>Direct: Cash Working Capital, JJ's incident, Environmental costs, Property Taxes, Kansas Property Taxes, Cyber Security Costs, Energy Efficiency, Low Income Energy Assistance Program, One time Energy Affordability Program, Low Income Weatherization, Red Tag Program</p> <p>Rebuttal: Cyber-Security, Environmental and Kansas Property Tax Trackers, St Peters Lateral Pipeline</p> <p>Surrebuttal: Kansas Property Tax, Cash Working Capital, Energy Efficiency, JJ's related costs, Rate base treatment of Red Tag Program, St Peters pipeline lateral and MGE's one-time Energy Affordability Program</p> <p>Litigated: Kansas Property taxes and Trackers</p>
2016-2017	ER-2016-0285-Contested	Kansas City Power & Light Company (Electric Rate Case)	<p>Direct: Greenwood Solar, Fuel Inventories, Transmission Revenue, Ancillary Services, Transmission Congestion Rights, Market to Market Sales, Revenue Neutral Uplift charges, Fuel additives, Purchase Power, Fuel prices, Off System Sales IT Software, FERC Assessment, SPP Administrative fees, Transmission expense, CIP and Cyber Security, Depreciation Clearing, ERPP, Surface Transportation Board Reparation Amortization Amortization</p> <p>Rebuttal: Transmission expense/revenue and Property tax Forecasts/Trackers, Wholesale Transmission Revenue</p> <p>Surrebuttal Transmission expense/revenue and Property tax Forecasts/Trackers, Wholesale Transmission Revenue, Transmission Wholesale Revenue, Greenwood Solar</p> <p>True-up Direct: Transmission Expense and Revenue, Transmission Congestion Rights</p> <p>True-up Rebuttal: Transmission Expense</p> <p>Litigated: Transmission Expense</p>

Year	Case/Tracking Number	Company Name	Type of Testimony/Issue
2016	ER-2016-0156-Stipulated	KCP&L Greater Missouri Operations Company (Electric Rate Case)	<p>Direct: Greenwood Solar, Fuel Inventories, Transmission Revenue, Ancillary Services, Transmission Congestion Rights, Market to Market Sales, Revenue Neutral Uplift charges, Fuel additives, Purchase Power, Fuel prices, Off System Sales IT Software Maintenance, FERC Assessment, SPP Administrative fees, Transmission expense, CIP and Cyber Security, Depreciation Clearing, Amortization of Regulatory Liabilities and Assets, Transource</p> <p>Rebuttal: Cyber-Security and Transmission expense/revenue Forecasts/Trackers, Wholesale Transmission Revenue</p> <p>Surrebuttal: Cyber-Security and Transmission expense/revenue Forecasts/Trackers, Crossroad Transmission expense, Wholesale Transmission Revenue, Greenwood Solar, Amortizations</p>
2016	EA-2015-0256-Contested	KCP&L Greater Missouri Operations Company (Solar CCN)	<p>Deposition</p> <p>Direct and Rebuttal Testimony: No pre-filed testimony. Live testimony during hearing</p>
2015	WO-2016-0098	Missouri American Water Company- Infrastructure Service Replacement Surcharge (ISRS Reconciliation)	Staff Memorandum
2015	ER-2014-0370-Contested	Kansas City Power & Light Company (Electric Rate Case)	<p>Direct: Fuel Inventories, Transmission Revenue, Ancillary Services, Transmission Congestion Rights, Market to Market Sales, Revenue Neutral Uplift charges, Fuel additives, Purchase Power, Fuel prices, IT Roadmap O&M, FERC Assessment, SPP Administrative fees, Transmission expense, Research and Development Tax Credit,</p> <p>Rebuttal: Property Tax, Vegetation Management and Cyber Security Trackers, SPP Region-Wide Transmission, Transmission Wholesale Revenue</p> <p>Surrebuttal: Property Tax, Vegetation Management and Cyber Security and Transmission Trackers, SPP Region-Wide Transmission, Transmission Wholesale Revenue, Transmission Expense</p> <p>True-up Rebuttal: Independence Power & Light Transmission Expense</p> <p>Litigated Issues: Transmission expense, Property Tax expense, CIP/Cyber Security expense, Independence Power & Light Transmission Expense</p>
2014	HR-2014-0066-Stipulated	Veolia Energy Kansas City, Inc. (Steam Rate Case)	<p>Direct: Fuel Inventories, Prepayments, Material Supplies, Customer Deposits, Fuel Expense, Purchased Power, Environmental Fees, Miscellaneous Non-Recurring Expenses</p>
2014	GR-2014-0007-Stipulated	Missouri Gas Energy Company (Gas Rate Case)	<p>Direct: Cash Working Capital, Revenues, Bad Debt, Outside Services, Environmental costs, Energy Efficiency, Regulatory Expenses, Amortization Expense, System Line Replacement costs, Property taxes, Kansas Property taxes</p> <p>Surrebuttal: Property taxes, Cash Working Capital, Manufactured Gas Plant costs</p>
2013	GO-2013-0391	Missouri Gas Energy - Infrastructure Service Replacement Surcharge (ISRS)	Staff Memorandum

Year	Case/Tracking Number	Company Name	Type of Testimony/Issue
2013	WM-2013-0329	Bilyeu Ridge Water Company, LLC (Water Sale Case)	Staff Memorandum
2012	ER-2012-0175-Contested	KCP&L Greater Missouri Operations Company (Electric Rate Case)	<p>Direct: Revenues, L&P Revenue Phase In, Maintenance, L&P Ice Storm AAO, Iatan 2 O&M, Bad Debt, Outsourced Meter reading, Credit Card fees, ERPP, Renewable Energy Costs</p> <p>Rebuttal: Bad Debt, Property tax tracker, Renewable Energy Costs</p> <p>Surrebuttal: Bad Debt, Renewable Energy Costs, Property tax tracker, Revenues, L&P Ice Storm AAO, L&P Revenue Phase In, Credit and Debit Card fees</p>
2012	ER-2012-0174-Contested	Kansas City Power & Light Company (Electric Rate Case)	<p>Direct: Revenues, Maintenance, Wolf Creek Refueling, Nuclear Decommissioning, Iatan 2 O&M, Hawthorn V SCR, Hawthorn V Transformer, Bad Debt, Credit Card fees, ERPP, Demand Side Management costs, Renewable Energy Costs</p> <p>Rebuttal: Bad Debt, Property tax tracker, Renewable Energy Costs</p> <p>Surrebuttal: Bad Debt, Hawthorn SCR and Transformer, Renewable Energy Costs, Property tax tracker, Revenues, Credit and Debit card fees.</p>
2012	WM-2012-0288	Valley Woods Water Company, Inc. (Water Sale Case)	Staff Memorandum
2012	GO-2012-0144	Missouri Gas Energy - Infrastructure Service Replacement Surcharge (ISRS)	Staff Memorandum
2011	HR-2011-0241-Stipulated	Veolia Energy Kansas City, Inc. (Steam Rate Case)	Direct: Revenues, Allocations, Income Taxes, Miscellaneous Non-recurring expenses
2010-2011	ER-2010-0356-Contested	KCP&L Greater Missouri Operations Company (Electric Rate Case)	<p>Direct: Plant/Reserve, Cash Working Capital, Maintenance, Ice Storm AAO, Iatan 2 O&M, Depreciation Clearing, Property Taxes, Outsourced Meter reading, Insurance, Injuries and Damages</p> <p>Rebuttal: Property Tax, Maintenance</p> <p>Surrebuttal: Property Tax</p>
2010-2011	ER-2010-0355-Contested	Kansas City Power & Light Company (Electric Rate Case)	<p>Direct: Plant/Reserve, Cash Working Capital, Maintenance, Wolf Creek Refueling, Nuclear Decommissioning, Maintenance, Iatan 2 O&M, Depreciation Clearing, Hawthorn V SCR Impairment, Property Taxes, Insurance, Injuries and Damages</p> <p>Rebuttal: Property Tax, CWC-Gross Receipts Tax, Maintenance</p> <p>Surrebuttal: Property Tax, CWC-Gross Receipts Tax, Maintenance, Injuries and Damages, Decommissioning Expense,</p> <p>Litigated: Hawthorn V SCR Settlement, Hawthorn V Transformer Settlement</p>
2011	SA-2010-0219	Canyon Treatment Facility, LLC (Certificate Case)	Staff Memorandum
2010	WR-2010-0202	Stockton Water Company (Water Rate Case)	Staff Memorandum
2010	SR-2010-0140	Valley Woods Water Company (Water Rate Case)	Staff Memorandum

Year	Case/Tracking Number	Company Name	Type of Testimony/Issue
2010	WR-2010-0139	Valley Woods Water Company (Sewer Rate Case)	Staff Memorandum
2010	SR-2010-0110	Lake Region Water and Sewer (Sewer Rate Case)	Direct: Plant and Reserve, CIAC, PSC Assessment, Property Taxes, Insurance, Injuries and Damages, Rate Case Expense, Other Operating Expenses, Allocations
2010	WR-2010-0111	Lake Region Water and Sewer (Water Rate Case)	Direct: Plant and Reserve, CIAC, PSC Assessment, Property Taxes, Insurance, Injuries and Damages, Rate Case Expense, Other Operating Expenses, Allocations
2009	GR-2009-0355-Stipulated	Missouri Gas Energy (Gas Rate Case)	Direct: Cash Working Capital
2009	ER-2009-0090-Global Settlement	KCP&L Greater Missouri Operations Company (Electric Rate Case)	Direct: Plant/Reserve, Cash Working Capital, Maintenance, Depreciation Clearing, Property Taxes, Bank Fees, Insurance, Injuries and Damages, Ice Storm AAO Rebuttal: Property Tax, CWC-Gross Receipts Tax Surrebuttal: Property Tax, CWC Gross Receipts Tax, Maintenance, Injuries and Damages
2009	HR-2009-0092-Global Settlement	KCP&L Greater Missouri Operations Company (Steam Rate Case)	Direct: Plant/Reserve, Cash Working Capital, Maintenance, Property Taxes, Bank Fees, Insurance, Injuries and Damages Rebuttal: Property Tax
2009	ER-2009-0089-Global Settlement	Kansas City Power & Light Company (Electric Rate Case)	Direct: Plant/Reserve, Cash Working Capital, Maintenance, Depreciation Clearing, Hawthorn V Subrogation proceeds, Hawthorn V Transformer, DOE Refund, Property Taxes, Bank Fees, Insurance, Injuries and Damages, Ice Storm AAO Rebuttal: Property Tax, CWC-Gross Receipts Tax Surrebuttal: Property Tax, CWC Gross Receipts Tax, Maintenance, Injuries and Damages
2008	HR-2008-0300-Stipulated	Trigen Kansas City Energy Corporation (Steam Rate Case)	Direct: Johnson Control Contract, Payroll, Payroll Taxes, and Benefits, Allocations, Insurance
2008	WR-2008-0314	Spokane Highlands Water Company (Water Rate Case)	Staff Memorandum
2007	GO-2008-0113	Missouri Gas Energy - Infrastructure Service Replacement Surcharge (ISRS)	Staff Memorandum