

*Exhibit No.:*  
*Issue(s):* *Cloud Computing  
Costs, Paperless  
Bill Credit, Time of  
Use Pilot Costs*  
*Witness:* *Karen Lyons*  
*Sponsoring Party:* *MoPSC Staff*  
*Type of Exhibit:* *Rebuttal Testimony*  
*Case No.:* *ER-2019-0335*  
*Date Testimony Prepared:* *January 21, 2020*

**MISSOURI PUBLIC SERVICE COMMISSION**  
**FINANCIAL AND BUSINESS ANALYSIS DIVISION**  
**AUDITING DEPARTMENT**

**REBUTTAL TESTIMONY**

**OF**

**KAREN LYONS**

**UNION ELECTRIC COMPANY,  
D/B/A AMEREN MISSOURI**

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

*Jefferson City, Missouri*  
*January 2020*

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**OF**  
**KAREN LYONS**  
**AMEREN MISSOURI COMPANY**  
**CASE NO. ER-2019-0335**

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**REBUTTAL TESTIMONY**  
**OF**  
**KAREN LYONS**  
**AMEREN MISSOURI COMPANY**  
**CASE NO. ER-2019-0335**

Q. Please state your name, employment position, and business address.

A. Karen Lyons, Utility Regulatory Auditor with the Missouri Public Service Commission (“Commission” or “PSC”), Fletcher Daniels State Office Building, 615 East 13th Street, Kansas City, Missouri 64106.

Q. Are you the same Karen Lyons who has previously provided testimony in this case?

A. Yes. I contributed to Staff’s Cost of Service Report (“COS Report”) filed on December 4, 2019 and Staff’s Class Cost of Service Report (“CCOS Report”) filed on December 18, 2019 in the Ameren Missouri rate case designated as Case No. ER-2019-0335.

**EXECUTIVE SUMMARY**

Q. Please summarize your rebuttal testimony.

A. The purpose of my rebuttal testimony is to respond to Ameren Missouri’s proposals for the accounting treatment of cloud computing license fees, the paperless bill credit and the time of use pilot costs. I will respond to the following Ameren Missouri witnesses that address these issues:

- Laura M. Moore-Cloud computing costs
- Mark C. Birk-Paperless bill credit

- 1           • Steven M. Wills-Time of Use pilot costs

2           Q.     Are there other Staff witnesses addressing Ameren Missouri's proposals  
3 addressed above?

4           A.     Yes. Staff witness Contessa King addresses Ameren Missouri's paperless bill  
5 credit, and Staff witnesses Sarah Lange and Robin Kliethermes address Ameren Missouri's  
6 time of use proposal.

7           **CLOUD COMPUTING COSTS**

8           Q.     What is Ameren Missouri's proposal regarding cloud computing costs in this  
9 rate proceeding?

10          A.     Ameren Missouri recommends that cloud computing software costs  
11 (“off-premise”) should be treated in the same manner as on-premise software. Specifically, that  
12 both cloud computing software costs and on-premise software costs should be treated as a  
13 capital investment and eligible to earn a rate of return.<sup>1</sup> Ms. Moore states on page 9, lines 3-7:

14           Cloud computing arrangements can be divided into underlying components related to  
15 the use of the software license and maintenance of the software. Ameren Missouri has  
16 accounted for each component and, consistent with the regulatory accounting treatment of on-  
17 premise software, has only capitalized for ratemaking purposes the underlying software license  
18 component.

19           Ameren Missouri proposes to book the software license component in Federal Energy  
20 Regulatory Commission (“FERC”) account 303.

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<sup>1</sup> Laura M. Moore Direct Testimony, pages 8-9.

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1 Q. Does Staff agree that the license related to cloud computing software should  
2 have the same accounting treatment as on-premise software?

3 A. No. On-premise software is installed and runs on a utility's server and typically  
4 requires the purchase of software licensing. Generally a utility's internal resources are used to  
5 maintain the software solution. Conversely, cloud computing software solutions are  
6 off-premise solutions that are hosted and supported by a third party and accessed through the  
7 internet. There are specific Financial Accounting Standards Board ("FASB") requirements that  
8 must be met that allow a utility to capitalize a software license. In Staff's review of  
9 Ameren Missouri's proposal to capitalize cloud computing license costs, Staff found that it has  
10 not met the requirements to capitalize these costs.

11 Q. How is Ameren Missouri currently recording cloud computing costs in its books  
12 and records?

13 A. Ameren Missouri is currently booking cloud computing expenses in  
14 FERC account 921.002 and 923.003.<sup>2</sup> Beginning in January 2019, Ameren Missouri also  
15 started capitalizing cloud implementation, setup, and other upfront costs in FERC  
16 Account 303.C05.

17 Q. Does the National Association of Regulated Utility Commissioners (NARUC)  
18 Uniform System of Accounts (USOA) address accounting treatment of off-premise cloud  
19 computing costs?

20 A. No. Although the USOA does not specifically address cloud computing costs,  
21 it does provide an explanation of the types of costs that can be booked to FERC  
22 account 303-Miscellaneous Intangible Plant. The NARUC USOA states, "This account shall

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<sup>2</sup> Case No. ER-2019-0335, Staff Data Request 248.

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1 include the cost of patents, licenses, privileges, and other intangible property necessary or  
2 valuable in the conduct of utility operations and not specifically chargeable to any  
3 other account.”

4 Q. Does the FASB provide accounting guidance on how to book the license  
5 component of off-premise software solutions?

6 A. Yes. FASB issued an Accounting Standards Update (“ASU”) in April 2015.  
7 ASU No. 2015-05 Subtopic 350-40<sup>3</sup>, entitled “Customer’s Accounting for Fees Paid in a  
8 Cloud Computing Arrangement.” In this update, FASB defines a hosting arrangement as one  
9 where (1) the customer has the contractual right to take possession of the software at any time  
10 during the hosting period without significant penalty and (2) it is feasible for the customer to  
11 either run the software on its own hardware or contract with another party unrelated to the  
12 vendor to host the software. If a hosting arrangement does not meet both criteria then the  
13 hosting arrangement is considered a service contract, which is recorded as an expense. It is not  
14 considered a capital item.

15 Q. Does Ameren Missouri’s proposal to capitalize the license component of its  
16 cloud computing solution meet the criteria above?

17 A. No. Ameren Missouri’s cloud computing software solution is an off-premise  
18 solution that is hosted and supported by a third party and accessed through the internet. It is  
19 not feasible for Ameren Missouri to run the software on its own hardware and take possession  
20 of the software.

21 Q. Does FASB provide guidance on the accounting treatment of implementation  
22 costs for cloud computing solutions?

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<sup>3</sup> FASB ASU No. 2015-15 Subtopic 350-40 is attached to this testimony as Schedule 1.

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1           A.     Yes. FASB update ASU No. 2018-15 Subtopic 350-40<sup>4</sup> ensures consistency  
2 between the requirements for capitalizing implementation costs incurred in a hosting  
3 arrangement that is a service contract (off-premise) and the requirements for capitalizing  
4 implementation costs incurred to develop or obtain internal-use software (on-premise). The  
5 amendments to ASU No. 2018-15 Subtopic 350-40 with regard to implementation costs are  
6 effective for annual reporting periods beginning after December 15, 2020, and interim periods  
7 within annual periods beginning after December 15, 2021. Early adoption of the amendments  
8 in the update is permitted, including adoption in any interim period, for all entities. Based on  
9 discussions with Ameren Missouri personnel, it is Staff's understanding that Ameren Missouri  
10 elected for early adoption of capitalizing implementation costs.

11           Q.     What is Staff's position at this time regarding the appropriate ratemaking and  
12 accounting treatment for cloud computing costs?

13           A.     Consistent with the FASB Update ASU No. 2015-05 Subtopic 350-40  
14 and ASU No. 2018-15 Subtopic 350-40, Staff's position is that for ratemaking purposes,  
15 Ameren should treat cloud computing costs as an annualized level of expense in rates and  
16 capitalize implementation costs. Since there is currently no accounting guidance from FERC  
17 of which Staff is aware, and Ameren Missouri does not meet the requirements set forth by  
18 FASB ASU No. 2015-05 Subtopic 350-40 for the capitalization of cloud computing fees,  
19 Staff is opposed to capitalizing the license component for Ameren Missouri's cloud  
20 computing solution.

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<sup>4</sup> FASB ASU No. 2018-15 Subtopic 350-40 is attached to this testimony as Schedule 2.

1 **PAPERLESS BILL CREDIT**

2 Q. What is Ameren Missouri's proposal regarding paperless bill credit in this  
3 rate proceeding?

4 A. Mr. Birk states on page 3, lines 7-11 of his direct testimony,  
5 Ameren Missouri proposes a \$0.50 incentive per bill, over a one-year period, for  
6 customers who enroll in paperless billing. This will amount to a \$6 incentive for  
7 each new enrollee in the program. The proposed incentive amount is designed  
8 to approximately align with the amount of the estimated savings (in postage,  
9 printing, and other costs) the Company receives per customer who opts for  
10 paperless billing.

11 Q. Is Staff opposed to the bill credit Ameren Missouri proposed to incent customers  
12 to utilize its paperless billing option?

13 A. Yes. Instead of all of Ameren Missouri's customers receiving the benefit of the  
14 savings associated with paperless billing, under Ameren Missouri's proposal just the customers  
15 that sign up for paperless billing will receive the benefits. Since all customers pay for all costs  
16 associated with generating paperless and paper bills, all customers should equally benefit from  
17 savings associated with paperless billing.

18 Q. Are there Ameren Missouri customers currently enrolled in paperless billing?

19 A. Yes. There are 222,618 Ameren Missouri customers currently enrolled in  
20 paperless billing.<sup>5</sup>

21 Q. Of the Ameren Missouri customers currently enrolled in paperless billing, how  
22 many received a bill credit?

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<sup>5</sup> Response to Staff Data Request 254, submitted 9/12/2019. Ameren Missouri has 211,136 residential customers and 11,482 non-residential customers enrolled in paperless billing.



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1           A.     None. Since a bill credit was not provided to Ameren Missouri customers that  
2 are currently enrolled in paperless billing, all Ameren Missouri customers benefit from the  
3 savings associated with customers currently enrolled in paperless billing.

4           Q.     Did Ameren Missouri propose a paperless bill credit in its last general rate case,  
5 Case No. ER-2016-0179?

6           A.     Yes. Parties to Case No. ER-2016-0179 entered into a global settlement<sup>6</sup> that  
7 did not specifically address the paperless bill credit proposed by Ameren Missouri in that case.

8           Q.     Is Ameren Missouri's proposal for a paperless bill credit in this case the same as  
9 that proposed in the last general rate case?

10          A.     No. In Case No. ER-2016-0179, Ameren Missouri proposed a \$.40 bill credit  
11 and a corresponding reduction to expenses related to the cost savings for not issuing a  
12 paper bill.

13          Q.     Did Staff oppose the paperless bill credit in Case No. ER-2016-0179?

14          A.     Yes. There were several aspects of Ameren Missouri's proposal that Staff  
15 opposed in Case No. ER-2016-0179. The two that I will focus on are as follows:

- 16           • All Ameren Missouri customers would not receive the benefit of the cost savings  
17           associated with the paperless bill.
- 18           • The proposal increased Ameren Missouri's revenue requirement.

19          Q.     Will Ameren Missouri's current proposal impact the revenue requirement in  
20 this case?

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<sup>6</sup> ER-2016-0179-Order Approving Unanimous Stipulation and Agreement, 3/8/2017.

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1           A.     No. In this case, Ameren Missouri did not make an adjustment for the cost  
2 savings associated with the conversion of paperless billing and is not proposing to reduce  
3 revenues for the amount of the bill credit as it proposed in Case No. ER-2016-0179.

4           Q.     If the revenue requirement is not impacted, why is Staff opposed to Ameren’s  
5 recommended treatment of the paperless bill credit in this case?

6           A.     Similar to Ameren Missouri’s previous proposals for the paperless bill credit,  
7 Ameren Missouri customers that enroll in paperless billing will receive the benefit of the cost  
8 savings as a result of the paperless bill credit. However, no customers that have paper billing  
9 or were previously enrolled in paperless billing will receive the benefit of the costs savings  
10 Ameren Missouri proposes. Further, if the Commission approves this request, revenues in  
11 Ameren Missouri’s future general rate case(s) will be reduced as a result of the paperless bill  
12 credit, and the reduced revenues will offset the cost savings that occur from customers enrolling  
13 in paperless billing. All costs associated with delivering a bill are paid by all customers, both  
14 paper and electronically billed customers. Since all of Ameren Missouri’s customers pay these  
15 costs, all customers should benefit from any savings associated with electronic statements.

16          Q.     On page 4, lines 10-11 of his testimony, Mr. Birk states that “[n]o customers  
17 will bear the cost of these incentives.” Do you agree?

18          A.     No. Although this proposal will not impact the revenue requirement in this case,  
19 it will impact future Ameren Missouri rate case(s). The paperless billing proposal will result in  
20 a reduction in revenue, which will increase Ameren Missouri’s revenue requirement in future  
21 rate cases. Under this scenario, if revenue is unadjusted, Ameren Missouri customers that are  
22 currently enrolled in paperless billing or receive a paper bill will pay more in rates than if the

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1 cost savings from paperless billing is reflected in Ameren Missouri's cost of service as  
2 it is currently.

3 Ameren Missouri designed its paperless bill credit proposal in this case so not all of its  
4 customers will benefit from the costs savings occurring when customers enroll in paperless  
5 billing. The only customers benefitting are those that enroll and receive the \$.50 bill credit per  
6 month. For example, Ameren Missouri has identified the cost savings for paperless billing is  
7 approximately \$.47 per customer per month. In the next rate case, assuming 100 customers  
8 enroll in paperless billing, the cost savings associated with the customers enrolling in paperless  
9 billing is \$564 (100 x \$.47 x 12). Ignoring the proposed bill credit, the \$564 in cost savings  
10 should be reflected in Ameren Missouri's cost of service and shared by all customers. If the  
11 same 100 customers receive the full twelve month credit, the cost savings of \$564 is offset by  
12 the amount of bill credits of \$600 x (100 x \$.50 x 12) and consequently eliminates the savings  
13 for all customers, except those that enrolled in paperless billing.

14 Q. Would Staff's position change if Ameren Missouri offered an alternative  
15 incentive?

16 A. No. In response to Staff Data Request 0257.1, Ameren Missouri provided an  
17 internal paperless billing statement study. The study is attached to Staff witness Contessa  
18 King's rebuttal testimony as Schedule C. The study included alternative incentives for enrolling  
19 in paperless billing that include but are not limited to gift cards, ipads, etc. Any savings  
20 associated with customers enrolling in paperless billing would be offset by the costs incurred  
21 for these type of incentives. It is Staff's position that all customers should benefit from savings  
22 associated with paperless billing. If Ameren Missouri offered these type of incentives to

1 customers enrolling in paperless billing, Staff would expect it to book the costs below the line  
2 to ensure that all customers receive the benefit of cost savings.

3 **3 PART TIME OF USE COST TRACKER**

4 Q. What is Ameren Missouri's proposal regarding the 3 part time of use  
5 cost tracker?

6 A. On page 62, lines 7-11 of his direct testimony Ameren Missouri witness Steven  
7 M. Wills proposes the following pro forma adjustment:

8 I recommend a two-year pilot study, with \$1 million per year to be  
9 included in the revenue requirement. I also suggest a one-way tracker  
10 through which any over recovery of pilot costs be flowed back to  
11 customers in a subsequent rate case. If the pilot costs come in higher than  
12 estimated, the Company would absorb them. If the pilot can be  
13 accomplished at lower cost, the difference would be tracked and returned  
14 to customers.

15  
16 Q. Does Staff agree that \$1 million in estimated costs should be included in Ameren  
17 Missouri's cost of service and that the costs should be tracked as proposed by Mr. Wills?

18 A. No.

19 Q. Did Ameren Missouri provide support for the inclusion of \$1 million in its cost  
20 of service for its proposed time of use pilot?

21 A. Mr. Wills provided a high level estimate of the expected costs for the time of  
22 use pilot on page 62 of his direct testimony. The categories of costs include focus groups,  
23 customer recruitment and retention, educational materials, participant surveys, billing system  
24 programming, technology/software and evaluations. Ameren Missouri did not provide support  
25 for how the cost estimates were derived.

26 Q. Does Staff have concerns with the categories of respective costs identified by  
27 Mr. Wills?

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1           A.     Yes. Staff understands that there will be incremental costs for implementing a  
2 3 part time of use rate design pilot. If the 3 part time of use pilot program is approved by the  
3 Commission, Ameren Missouri will incur costs for focus groups, marketing, surveys, etc.  
4 However, the level of costs that will be incurred is not known and measurable. Mr. Wills also  
5 suggests that there will be additional costs for programming the billing system. The billing  
6 system must be programmed for every approved rate design change that occurs as a result of a  
7 general rate case. The 3 part time of use pilot program is no different. To the extent internal  
8 employees program the billing system there will be no incremental costs for the 3 part time of  
9 use pilot because all labor costs will be included in Ameren Missouri's cost of service.

10           Q.     Does Ameren Missouri currently incur costs for its time of use program  
11 approved by the Commission in Case No. ER-2016-0179?

12           A.     Yes. In response to Staff Data Request 390.2,<sup>7</sup> Ameren Missouri stated that  
13 there was not a material level of cost incurred for its existing time of use program. The response  
14 also indicated that a precise level of cost incurred could not be determined. Staff is unclear  
15 how Ameren Missouri can state that the costs are not material but is unable to provide Staff  
16 with the actual costs incurred. Mr. Wills also did not address any costs currently paid for by  
17 Ameren Missouri customers in his estimate provided in his direct testimony.

18           Q.     Has the Commission approved a time of use rate design pilot for other Missouri  
19 utilities and if so, did the Commission approve a tracker for costs to implement the program?

20           A.     In Case No. ER-2018-0145 and ER-2018-0146, the Commission approved a  
21 *Non-Unanimous Partial Stipulation and Agreement Concerning Rate Design Issues* that  
22 included a time of use pilot rate design for Kansas City Power & Light Company ("KCPL")

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<sup>7</sup> Staff Data Request 390.2 in Case No. ER-2019-0335 is attached to this testimony as Schedule 3.

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1 and KCPL Greater Missouri Operations Company (“GMO”), now known as Evergy Missouri  
2 Metro and Evergy Missouri West, respectively. As part of the agreement, Evergy Missouri  
3 Metro and Evergy Missouri West is authorized to defer prudently incurred program costs.

4 Q. What is Staff’s recommendation with regard to Ameren Missouri’s proposed 3  
5 part time of use tracker and the inclusion of \$1 million in its cost of service?

6 A. Staff is opposed to including \$1 million of costs in Ameren Missouri’s cost of  
7 service that are not known and measurable. Staff recognizes that if the Commission approves  
8 a 3 part time of use pilot program for Ameren Missouri, there may be incremental costs incurred  
9 and therefore recommends that Ameren Missouri be allowed to defer prudently incurred  
10 incremental costs for the 3 part time of use pilot program to be reviewed in a future general  
11 rate case.

12 Q. Does this conclude your rebuttal testimony?

13 A. Yes.

**BEFORE THE PUBLIC SERVICE COMMISSION**

**OF THE STATE OF MISSOURI**

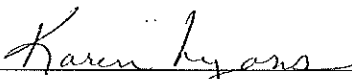
In the Matter of Union Electric Company            )  
d/b/a Ameren Missouri's Tariffs to Decrease        )  
Its Revenues for Electric Service                    )            Case No. ER-2019-0335

**AFFIDAVIT OF KAREN LYONS**

STATE OF MISSOURI        )  
  )  
COUNTY OF JACKSON     )            ss.

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

Further the Affiant sayeth not.

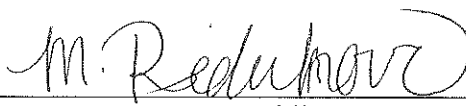
  
\_\_\_\_\_  
KAREN LYONS

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Jackson, State of Missouri, at my office in Kansas City, on this 16<sup>th</sup> day of January, 2020.



M. RIDENHOUR  
My Commission Expires  
July 22, 2023  
Platte County  
Commission #19603483

  
\_\_\_\_\_  
Notary Public