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**Issues:** Economic Development Riders  
**Witness:** Jane Lohraff  
**Sponsoring Party:** Missouri Department of Economic  
Development - Division of Energy  
**Type of Exhibit:** Direct Testimony  
**Case No:** ER-2014-0258

**MISSOURI PUBLIC SERVICE COMMISSION**

**UNION ELECTRIC COMPANY**

**d/b/a**

**AMEREN MISSOURI**

**CASE NO. ER-2014-0258**

**DIRECT TESTIMONY**

**OF**

**JANE LOHRAFF**

**ON**

**BEHALF OF**

**MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT**

**DIVISION OF ENERGY**

Jefferson City, Missouri

December 19, 2014

(Rate Design)

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

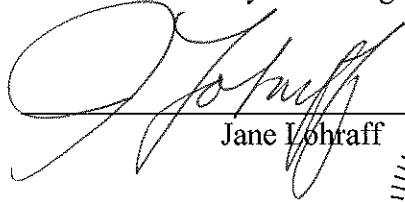
In the Matter of Union Electric Company d/b/a         )  
Ameren Missouri's Tariff to Increase Its                 )  
Revenues for Electric Service                                 )         Case No. ER-2014-0258

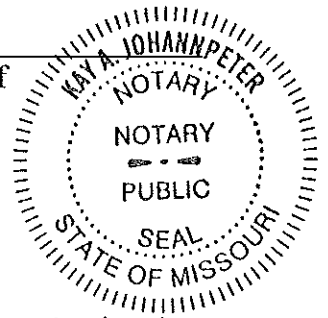
**AFFIDAVIT OF JANE LOHRAFF**

STATE OF MISSOURI                     )  
   ) ss  
COUNTY OF COLE                     )

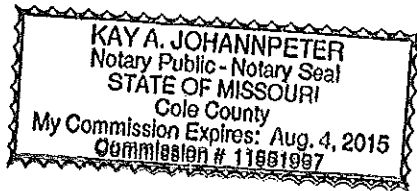
Jane Lohraff, of lawful age, being first duly sworn on her oath, deposes and states:

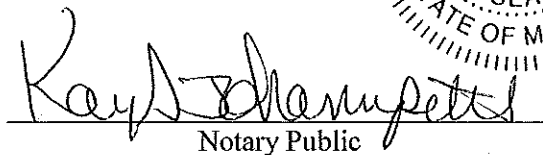
1. My name is Jane Lohraff. I work in the City of Jefferson, Missouri and I am employed by the Missouri Department of Economic Development as an Energy Policy Analyst, Division of Energy.
2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of the Missouri Department of Economic Development – Division of Energy.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

  
Jane Lohraff



Subscribed and sworn to before me this 19<sup>th</sup> day of December, 2014.



  
Notary Public

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1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. Jane Lohraff, Missouri Department of Economic Development, Division of Energy, 301  
4 West High Street, Suite 720, Jefferson City, Missouri 65102.

5 **Q. Have you previously filed testimony in this case?**

6 A. No.

7 **Q. On whose behalf are you testifying?**

8 A. I am testifying on behalf of the Missouri Department of Economic Development,  
9 Division of Energy (DE).

10 **Q. Please describe your educational background and employment experience.**

11 A. I received my Bachelor of Arts degree in Geology from Stephens College, Columbia,  
12 Missouri and my Masters of Science in Geology from the University of Missouri-  
13 Columbia.

14 I began work with the Missouri Department of Economic Development, Division of  
15 Energy, in September, 2014. I am an Energy Policy Analyst. Prior to working with the  
16 Missouri Department of Economic Development I was employed as a Policy Analyst,  
17 Policy Coordinator, and Supervisor of the Policy Coordination Unit within the Missouri  
18 Department of Conservation. Prior to working with the Missouri Department of  
19 Conservation, I was employed as a Hydrologist III with Missouri Department of Natural  
20 Resources, focusing on water policy and management issues.

21 **Q. What information did you review in preparing this testimony?**

22 A. I reviewed tariffs filed in EFIS to inventory existing economic development riders in  
23 effect for utilities regulated by the Missouri Public Service Commission. I reviewed

1 examples of economic development riders offered by utilities in other states to determine  
2 if they included an energy efficiency requirement. I reviewed the Missouri Energy  
3 Efficiency Investment Act<sup>1</sup>, Commission Rules implementing MEEIA<sup>2</sup> and Ameren  
4 Missouri MEEIA Program<sup>3</sup>.

5 **Q. What additional experience do you have related to MEEIA implementation?**

6 A. On behalf of the Division of Energy, I have participated in Ameren Missouri MEEIA  
7 Program advisory group meetings.

8 **II. PURPOSE AND SUMMARY OF TESTIMONY**

9 **Q. What is the purpose of your testimony?**

10 A. The purpose of my testimony is to present the DE's recommendation to modify Ameren  
11 Missouri's Economic Development Rider (EDRR) and Economic Re-Development Rider  
12 (ERR)<sup>4</sup>, to require active participation in Ameren Missouri's MEEIA program as an  
13 eligibility requirement for receiving EDRR or ERR benefits.

14 **Q. Please provide a summary of your findings and recommendations.**

15 A. My testimony supports the implementation of cost-effective energy efficiency initiatives  
16 through MEEIA as a condition of taking service under Ameren Missouri's EDRR or  
17 ERR.

- 18 • EDRR and ERR participation is voluntary and provides a significant benefit to the  
19 recipient.

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<sup>1</sup> Section 393.1075RSMo

<sup>2</sup> 4CSR 240-20.093 and 4CSR 240-20.094????

<sup>3</sup> Union Electric Tariff Sheets MO.P.S.C. Schedule No.6 Sheet No. 181 – 185 (June 30, 2013)

<sup>4</sup> Schedule JEL-1, sheets 86 and 87

- 1 • Requiring EDRR and ERR recipients to actively participate in Ameren Missouri's
- 2 MEEIA program ensures that Ameren Missouri's other customers, the State of
- 3 Missouri and the Company benefit from energy efficiency.
- 4 • Ameren Missouri MEEIA program is sufficiently flexible to allow for integration of
- 5 self-directed initiatives undertaken by EDRR and ERR qualified customers.

6 **III. LINKING ECONOMIC DEVELOPMENT INCENTIVES TO ENERGY**

7 **EFFICIENCY PROGRAMS**

8 **Q. Please summarize the Missouri Energy Efficiency Investment Act (MEEIA) and**

9 **why economic development riders should be linked to it.**

10 A. MEEIA directs the Missouri Public Service Commission to encourage regulated electric

11 utilities to offer energy efficiency programs to customers and create cost recovery

12 mechanisms. Specifically, the Commission "shall ensure that utility financial incentives

13 are aligned with helping customers use energy more efficiently and in a manner that

14 sustains or enhances utility customer's incentives to use energy more efficiently."<sup>5</sup>

15 Economic development riders create incentives that have not yet been aligned with

16 energy efficiency. Currently, the large businesses likely to qualify for economic

17 development riders may "opt out" of MEEIA if they 1) have a demand of 5,000 kilowatts

18 or more; or 2) operate an interstate pipeline pumping station; or 3) have a demand, in

19 aggregate, of 2,500 kilowatts or more and has a comprehensive demand-side or energy

20 efficiency program in place and can demonstrate savings achievement at least equal to

21 those expected from utility-provided program. The MEEIA "opt out" provision is

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<sup>5</sup> § 393.1075.3(2) RSMo.

1           disadvantageous to the utility, as it would not receive credit for those energy efficiency  
2           savings that might otherwise be generated under MEEIA.

3       **Q.   Please provide an overview of economic development riders currently offered by**  
4       **Missouri's investor-owned electric utilities.**

5       A.   Each of Missouri's four investor-owned electric utilities offer a rider designed to promote  
6       economic development and load retention. A copy of each rider is provided in Schedule  
7       JEL-1. The stated purpose of the riders is to encourage new or significantly expanded  
8       industrial or commercial businesses to locate in the utility's service area by offering them  
9       a reduction in their utility rates. Ameren Missouri also offers an economic re-  
10      development rider used to encourage re-development of certain geographical areas within  
11      the City of St. Louis to provide socio-economic benefits as well as more efficient  
12      utilization of existing infrastructure.<sup>6</sup>

13      **Q.   Please provide examples of the economic incentives currently offered through**  
14      **Missouri electric utilities' economic development riders.**

15      A.   The key feature of the current economic development riders is that each offers significant  
16      rate discounts for a period of potentially five years:

- 17           1.    Ameren Missouri's EDRR offers a discount rate of not more than 15% discount  
18           from tariff rates, before tax additions, for up to 60 months.<sup>7</sup> The Company's ERR  
19           offers a 15% discount from tariff rates, before tax additions, for up to 60 months.<sup>8</sup>

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<sup>6</sup> Schedule JEL-1, sheet 87

<sup>7</sup> Schedule JEL-1, Union Electric Tariff Sheet 86.1

<sup>8</sup> Schedule JEL-1, Union Electric Tariff Sheet 87.1

1           2.     Empire District Electric Company's generally available economic development  
2           rider reduces the pre-tax revenues by 30% the first year, 25% the second year,  
3           20% the third year, 15% the fourth year, and 10% the fifth year.<sup>9</sup>

4           3.     Kansas City Power & Light Company's (KCP&L) economic development rider  
5           reduces the pre-tax revenues under the Rider by reducing the otherwise applicable  
6           charges by 30% the first year, 25% the second year, 20% the third year, 15% the  
7           fourth year, and 10% the fifth year.<sup>10</sup>

8           4.     Kansas City Power & Light Company's -Greater Missouri Operations  
9           Company's (KCP&L\_GMO) generally available economic development rider  
10          reduces the pre-tax revenues under the Rider by reducing the otherwise applicable  
11          charges by 30% the first year, 25% the second year, 20% the third year, 15% the  
12          fourth year, and 10% the fifth year.<sup>11</sup>

13                   In addition to these types of incentives which are generally available to all  
14                   qualifying customers, certain utilities have negotiated longer-term discounts.

15   **Q.    What eligibility requirements are typically associated with Missouri utilities'**  
16   **economic development riders?**

17   **A.**   The Missouri electric utilities' economic development riders are offered in conjunction  
18          with local, regional or state governmental economic development activities and have a  
19          number of eligibility requirements including customer characteristics and specific  
20          demand characteristics such as peak load or load factor requirements. The currently  
21          available economic development riders are offered to industrial and commercial

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<sup>9</sup> Schedule JEL-1, Empire Tariff Sheet 22

<sup>10</sup> Schedule JEL-1, KCPL Tariff Sheet 32G

<sup>11</sup> Schedule JEL-1, KCPL-GMO Sheet 123.3



1 customers not engaged in selling or providing goods and services directly to the general  
2 public. The riders also limit rider availability to certain customer rate classes. Ameren  
3 Missouri's economic development rider applies only to 3M-Large General Service Rate,  
4 4M-Small Primary Service Rate, or 11M-Large Primary Service Rate.<sup>12</sup> The Empire  
5 District Electric Company's economic development rider applies to customers under the  
6 General Power Service-GP, Total Electric Building Service-TEB, Large Power-LP, or  
7 Special Transmission-ST rate schedules.<sup>13</sup> KCP&L's economic development rider  
8 applies to Medium General Service-MSG, Large General Service-LGS, Large Primary  
9 Service-LPS, Small General Service All Electric-SGA, Medium General Service All  
10 Electric-MGA, or Large General Service All Electric-LGA rates.<sup>14,15</sup> KCP&L-GMO's  
11 economic development rider applies to Medium General Service-MSG, Large General  
12 Service-LGS, Large Primary Service-LPS rates.<sup>16</sup>

13 The demand and load factor requirements of economic development riders also differ by  
14 utility. Ameren Missouri requires a minimum actual or projected of 500 kW average  
15 monthly peak demand and a 55% load factor. The Empire District Electric Company  
16 requires an annual load factor of 50% and peak demand of 300 kW within the first two  
17 years of service under the rider. KCP&L and KCP&L-GMO require the annual load  
18 factor to equal or exceed 55% and a peak demand of 200 kW for years three through five.

19 The customer's annual load factor measures annual average load as a proportion of peak  
20 load. Where customers fail to achieve threshold load factors, the Empire, KCP&L and

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<sup>12</sup> Schedule JEL-1, Union Electric Tariff Sheet 86

<sup>13</sup> Schedule JEL-1, Empire Tariff Sheet 22

<sup>14</sup> Schedule JEL-1, KCP&L Tariff Sheet 32E

<sup>15</sup> The SGA, MGA and LGA rates are no longer offered to new customers.

<sup>16</sup> Schedule JEL-1, KCP&L-GMO Tariff Sheet 123.3

1 KCP&L-GMO economic development riders identify additional factors which may be  
2 considered in determining if an economic development rider should continue. Significant  
3 job creation or investment, or improved off-peak utilization of the system are factors  
4 listed for consideration in continuing a discount.

5 **Q. Have energy efficiency initiatives been tied to utility economic development riders in**  
6 **other states?**

7 A. Yes. Included in Schedule JEL-2, are the following examples of tariffs from three states  
8 which link energy efficiency to economic development riders:

- 9 1. Indiana: Northern Indiana Public Service Company has as one of the qualifying criteria  
10 that high-efficiency, end-use equipment and construction technologies be used.<sup>17</sup>
- 11 2. Wisconsin: Alliant Energy/Wisconsin Power and Light's economic development rider  
12 states that the customer "shall implement all economically viable energy efficient options  
13 that have a payback period of five years or less."<sup>18</sup>
- 14 3. California: Pacific Gas and Electric Company requires a site inspection to identify energy  
15 efficient options and advises the customer on the range of cost-effective options.<sup>19</sup>

16 **Q. Please describe the MEEIA Programs available to Ameren Missouri's economic**  
17 **development rider customers.**

18 A. The purpose of Ameren Missouri's Business Energy Efficiency Program, which consists  
19 of four programs, is to proactively impact commercial and industrial customer energy use  
20 in such a way as to reduce consumption of electricity.<sup>20</sup>

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<sup>17</sup> Schedule JEL-2, IURC EDR 677, Sheet No. 126

<sup>18</sup> Schedule JEL-2, Alliant Energy Sheet No. 7.662

<sup>19</sup> Schedule JEL-2, Pacific Gas And Electric Company Electric Schedule ED, Sheet 3

<sup>20</sup> Union Electric Tariff Sheets MO.P.S.C. Schedule No.6 Sheet No. 181 – 185 (June 30, 2013)

1        The Standard Incentive Program provides directly paid incentives to the customer for  
2        purchasing energy efficient equipment, including HVAC (heating, ventilation, and air-  
3        conditioning), lighting, refrigeration, cooking, and water heating.

4        The Custom Incentive Program provides a direct payment or bill credit for installation of  
5        energy efficient equipment purchases, facility modernization, and industrial process  
6        improvement.

7        The Retro-Commissioning Program will capture energy and demand reductions from  
8        existing facilities by providing an energy assessment and assistance in implementing  
9        identified solutions.

10       The New Construction Incentive Program will capture energy and demand reductions  
11       from new construction projects during the design and/or construction process. Building  
12       owners and designers are encouraged to evaluate and install systems with higher energy  
13       efficiencies through training, design incentives and installation incentives.

14    **Q.    Why should Ameren Missouri's Economic Development Riders (EDRR and ERR),**  
15       **Tariff Sheet 86 and Tariff Sheet 87, be modified to require energy efficiency**  
16       **measures as an eligibility requirement for receiving EDRR and ERR benefits?**

17    **A.**    There are a number of reasons to incorporate MEEIA participation as an eligibility  
18       requirement of Ameren Missouri's **EDRR and ERR** :

- 19       • Demand Side Management, or customer energy efficiency, is projected to be the  
20       least-expensive, long-term option to address future energy needs for the citizens of  
21       Missouri.<sup>21</sup> The Ameren Integrated Resource Plan, Figure 1.3, shows that pursuing  
22       energy efficiency programs at a realistic, achievable potential (RAP) level can

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<sup>21</sup> Ameren Missouri , Investing in Missouri//2014 Integrated Resource Plan, Executive Summary, p.7

1 produce the lowest levelized cost of energy (LCOE), which is a measure of the per  
2 unit cost of energy produced by a resource over its expected useful life expressed in  
3 cents per kilowatt-hour. LCOE includes all of the costs of construction and  
4 ownership, such as the recovery of the capital investment and a fair return for  
5 investors, and all of the costs of operations.

- 6 • Reducing future energy use through demand side management can reduce reliance on  
7 fossil fuels and lower emissions furthering the energy policy goals of the State and  
8 better positioning individual utilities and the State to meet federal Clean Air Act and  
9 perhaps Clean Power Plan requirements when it becomes effective. Integrating  
10 Ameren Missouri's MEEIA Program into the voluntary economic development riders  
11 will also work to target high usage commercial and industrial customers for  
12 participation in MEEIA. Increased participation in MEEIA can benefit Ameren  
13 Missouri's other customers and the Company by better spreading program costs,  
14 reducing peak load, and deferring long-term need for new supply resources.
- 15 • Achieving energy efficiency through Ameren Missouri's established MEEIA  
16 Program relies on existing technology and available processes and expertise. Ameren  
17 Missouri's MEEIA offers both prescribed and custom programs that will allow  
18 flexibility in meeting the needs of these large customers.
- 19 • Ameren Missouri's ERR to MEEIA is consistent with the tariff's stated goals.

20 **III. PROPOSED TARIFF MODIFICATION**

21 **Q. How should Ameren Missouri's Economic Development Riders (EDRR and ERR),**  
22 **Tariff Sheet 86 and Tariff Sheet 87 be modified to incorporate MEEIA participation**  
23 **as an eligibility requirement for receiving EDRR and ERR benefits?**

1 A. A statement listing MEEIA participation as a requirement of the economic development  
2 riders should be added to the APPLICABILITY subsection of Sheet 86 and the  
3 AVAILABILITY subsection of Sheet 87 of the Ameren Missouri tariff.

4 **Q. What additional changes are you proposing?**

5 A. In order to be eligible for the economic development riders the Customer should be  
6 required to meet with Ameren Missouri's business program representatives to identify  
7 economically viable energy efficiency and demand side management opportunities. The  
8 Customer should be further required to participate in or implement all economically  
9 viable programs or projects that have a projected pay-back period of five years or less.  
10 Finally, the Customer should be required to implement all such programs or projects  
11 within the contract term for service under the EDRR or ERR. The Customer should have  
12 the option to request an independent economic analysis of the economic viability of such  
13 programs or projects, at the Customer's cost.<sup>22</sup>

14 **Q. Is there a limitation which should be recognized in requiring MEEIA participation**  
15 **as a condition of EDRR or ERR eligibility?**

16 A. Yes. Section 393.1075.14, RSMo, prohibits any customer of an electrical corporation  
17 who has received a state tax credit under sections 135.350 to 135.559, RSMo, or under  
18 sections 253.545 to 53.561, RSMo, from participation in demand-side programs if such  
19 program offers a monetary incentive to the customer, except that such prohibition shall  
20 not apply to any low-income customer who would otherwise be eligible to participate in  
21 the Company's demand-side programs. Subject to provisions as revised, this limitation  
22 should be noted as an exemption in the economic development tariffs.

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<sup>22</sup> This language mimics Wisconsin Power and Light EDR Sheet No. 7.662

1 **Q. To which customers should the tariff modifications apply?**

2 A. The MEEIA requirement should apply to customers initiating a request to take service  
3 under the EDRR or ERR following the effective date of the modified tariff.

4 **Q. Are any modifications to Ameren Missouri's MEEIA Tariff Sheets 90-90.5,**  
5 **necessary to implement your recommendation?**

6 A. No.

7 **Q. How might the EDRR or ERR participant benefit from your recommendation?**

8 A. In addition to the reduced utility rate specified by the economic development rider, the  
9 customer may benefit by reducing energy consumption and resource use, potentially  
10 improving the bottom line and profit margins, can lead to improved productivity and  
11 competitiveness. The customer may continue to benefit from the energy efficiency  
12 measures beyond the term of the economic development rider.

13 **Q. Do you anticipate that requiring MEEIA participation will significantly increase**  
14 **costs to economic development rider participants?**

15 A. There could be initial upfront costs for the economically viable energy efficiency  
16 measures less any incentives from the MEEIA programs. However, adding MEEIA as a  
17 participation requirement could actually result in substantial net savings to the participant  
18 as these initial costs and the monthly MEEIA charge is offset through lower operating  
19 costs.

20 **Q. How would the proposal benefit Ameren Missouri's other customers?**

21 A. Customers other than the one taking advantage of the economic development incentive  
22 benefit from improved system efficiency and the potential for lower long run energy  
23 costs, and better spreading of MEEIA-related costs.

1 **Q. How would the proposal benefit Ameren Missouri?**

2 A. Ameren Missouri's MEEIA cost recovery mechanism would allow Ameren Missouri to  
3 recover the MEEIA program costs, an offset for the throughput disincentive and an  
4 incentive based on achieved savings.

5 **Q. How would the proposal benefit the State?**

6 A. The state of Missouri can benefit from the recommendation by connecting existing  
7 program and funding streams, legislative and policy direction, and the private sector to  
8 effectively incent economic activity that accomplishes Missouri's energy goals. Reduced  
9 emissions can also help the individual utilities and the state meet federal Clean Air Act  
10 requirements and perhaps Clean Power Plan requirements when it becomes effective.

11 **Q. Are there other areas for which MEEIA participation could result in energy  
12 efficiency and associated customer benefits?**

13 A. Yes, there are numerous, unrealized potential areas where MEEIA participation could  
14 result in energy efficiency and savings, including water company infrastructure repair,  
15 drinking and waste water treatment operations, and utility assisted local building code  
16 adoption, compliance and enforcement. I attended public meetings associated with  
17 development of the Missouri Comprehensive State Energy Plan, where these  
18 opportunities were identified during discussion among Steering Committee experts from  
19 around the state. These opportunities should be explored by Ameren Missouri and its  
20 MEEIA program advisory group.

21 **IV. CONCLUSION**

22 **Q. Please restate your recommendation?**

1 A. The Commission should approve the Division of Energy's proposal to modify Ameren  
2 Missouri's EDRR and ERR tariffs to establish MEEIA participation as a requirement of  
3 taking service under the EDRR or ERR. The Commission should also approve the  
4 exemption related to Section 393.1124.14, RSMo, discussed in this testimony.  
5 Approving the Division of Energy's proposal can benefit the EDRR or ERR recipient, the  
6 Company, Ameren Missouri's other customers and the State of Missouri.

7 **Q. Does this conclude your direct testimony?**

8 A. Yes, it does.  
9  
10  
11