

*Exhibit No.:*  
*Issue:* Policy  
*Witness:* Natelle Dietrich  
*Sponsoring Party:* MoPSC Staff  
*Type of Exhibit:* Direct Testimony  
*Case No.:* ER-2016-0179  
*Date Testimony Prepared:* December 23, 2016

**MISSOURI PUBLIC SERVICE COMMISSION**

**COMMISSION STAFF DIVISION**

**DIRECT TESTIMONY**

**OF**

**NATELLE DIETRICH**

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

**CASE NO. ER-2016-0179**

*Jefferson City, Missouri*  
*December 2016*

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1           A.     The purpose of this testimony is to sponsor the Staff's recommended rate design  
2 as developed by Staff and described in the Class Cost-of-Service/Rate Design Report  
3 ("CCOS Report") and to sponsor Staff's Report Responding to Certain Commission Questions  
4 ("Responsive Report"), both of which are filed concurrently with this direct testimony.  
5 Consistent with Staff's Cost of Service Report filed December 9, 2016, the CCOS Report also  
6 includes Staff's recommendations concerning Ameren Missouri's Fuel and Purchased Power  
7 Adjustment Clause ("FAC") and its FAC tariff.

8     **CCOS REPORT**

9           Q.     What is Staff's rate design recommendation in this case?

10          A.     Staff recommends an adjustment of rates as follows:

11               1.     A revenue neutral shift in revenue responsibility from the Small General  
12 Service ("SGS") class to the Large Transmission Service ("LTS") class by approximately  
13 \$36,000 based on Staff's Class Cost of Service ("CCOS") Study results at the studied revenue  
14 requirement. This represents a 2.6% revenue neutral increase to the LTS class, and a 0.01%  
15 reduction to the SGS class.

16               2.     The Residential customer charge increase at the same percentage as the  
17 Residential class's revenue requirement, but only up to \$8.21 from the current \$8.

18               3.     The Commission adopt Staff's recommended changes to Rider FAC.

19               4.     Ameren Missouri evaluate, as part of its next rate case, the reasonableness  
20 and practicality of moving toward Seasonal and Shoulder rates.

21               5.     Modifying the "Fuel and Purchased Power Adjustment (Rider FAC)"  
22 definition of LTS tariff Sheet No. 62 to read "Applicable to 103.5% of metered kilowatt-hours  
23 (kWh) of energy."

1 **STAFF RATE DESIGN AND CCOS REPORT**

2 Q. How is the Staff's CCOS Report organized?

3 A. The CCOS Report is organized by topic as follows:

4 I. Executive Summary

5 II. Class Cost-of-Service Study Results

6 III. Staff's Class Cost-of-Service Study

7 IV. Rate Design

8 V. Fuel and Purchased Power Adjustment Clause Tariff  
9 Sheet Recommendations

10 **CLASS COST-OF-SERVICE STUDY**

11 Q. Did Staff perform a CCOS Study in this case?

12 A. Yes. Staff's CCOS Study is designed to determine what rate of return is produced  
13 by each customer class on that class's currently tariffed rates, for recovery of any newly  
14 determined revenue requirement amount. Staff's recommended interclass revenue responsibility  
15 shifts are designed to reasonably bring each class closer to producing the system-average rate of  
16 return used in determining Staff's recommended revenue requirement. Staff's recommended  
17 intra-class shifts will, where appropriate, redesign the rates that collect a particular class's  
18 revenues to better align that class's method of recovering revenue with the cost-causation for that  
19 class as indicated by the CCOS Study. Staff's intra-class recommendations largely focus on  
20 customer charge valuation.

21 **STAFF'S REPORT RESPONDING TO CERTAIN COMMISSION QUESTIONS**

22 Q. Please summarize Staff's Responsive Report.

1           A.     The Commission issued two orders seeking additional information from Staff.  
2     The first, issued on August 29, 2016, directed Staff to address certain issues related to Advanced  
3     Metering Infrastructure (“AMI”) smart meters; a Plug-in Electric Vehicle Rate (“PEV”);  
4     residential Time-of-Use (“ToU”) and Time-of-Day (“ToD”) Rate Design; Property Assessed  
5     Clean Energy (“PACE”) and Pay as You Save (“PAYS”). The second, issued on September 7,  
6     2016, directed Staff to submit an Infrastructure Efficiency Tariff that would provide for a  
7     discounted volumetric rate or customer charge, or a waiver or reduction of line extension-related  
8     charges, or some other mechanism to reduce bills of customers accessing infrastructure identified  
9     as under-utilized. Following is a summary of some of the key Staff observances as noted in the  
10    Responsive Report.

11           1.    AMI “Smart” Metering: For purposes of the Responsive Report, Staff sets  
12    forth definitions of various types of meters, then provides a discussion as to what is considered  
13    “smart” about those meters. Specific to Ameren Missouri, the Responsive Report notes that  
14    Ameren Missouri uses Automated Meter Reading (“AMR”) technology, while the other Missouri  
15    investor-owned utilities (“IOUs”) have various combinations of manual meter reading, AMR and  
16    AMI. Due to consumer concerns, a non-standard meter program was approved in the most  
17    recent KCP&L Greater Missouri Operations (“GMO”) rate case, Case No. ER-2016-0156. In the  
18    Responsive Report, Staff recommends Ameren Missouri implement the same type of program  
19    with a cost-based fee recovery to be borne by customers who participate in the program.

20           2.    PEV: Staff analyzed the Georgia Plug-In Electric Vehicle TOU rate. In the  
21    Responsive Report, Staff explains the Georgia model and states, that the Georgia model provides  
22    an example of how a PEV-ToU rate could be implemented in Missouri. Staff recommends

1 Ameren Missouri gather data and report annually to the Commission and interested stakeholders  
2 on the impact of EVs on grid reliability.

3           3. Residential ToU or ToD rate design: Ameren Missouri has an optional ToD  
4 service that is available to nearly all classes of customers. Ameren Missouri's tariff limits  
5 participation to 5,000 customers; however, as explained in the Responsive Report, actual  
6 participation exceeds this limitation. Further, participation is not available to customers with a  
7 current net metering agreement, and requires certain metering configurations. The on-peak/off-  
8 peak rate is only applicable to summer billing months. Ameren Missouri does not currently offer  
9 any hourly, real time or critical peak plans in Missouri. Ameren Missouri's residential customers  
10 are generally metered with AMR technology. A barrier to broader implementation of ToD rates  
11 would be the capability and cost of Ameren Missouri's contracted meter reading provider to  
12 provide multiple reads per day from existing AMR meters. Staff suggests Ameren Missouri  
13 initiate a mandatory geographically-limited dynamic pricing program to explore the applicability  
14 of such a program to mitigate upgrades to the distribution system.

15           4. PACE: PACE financing is designed to make payments affordable by offering  
16 a fixed interest rate that is payable over an extended period of time. Home improvement energy  
17 efficiency measures are permanently installed and assessed to the property. The assessment  
18 transfers homeowners when the home sells. Staff's Responsive Report discusses current  
19 residential PACE programs, and discusses plans to implement the program in other parts of  
20 Missouri. Commercial PACE projects in Ameren Missouri's service territory include an office  
21 building retrofit in Maryland Heights, a large warehouse and office building retrofit in  
22 Shrewsbury, and a manufacturing facility retrofit in Chesterfield.

1                   5. PAYS: PAYS enables utility customers to purchase and install cost-effective  
2 energy efficiency upgrades or distributed renewable energy assets through a voluntary program  
3 that assures immediate net savings to customers. The utility pays the up-front costs of the  
4 upgrades, then places a fixed charge on the customer's electric bill. The Responsive Report  
5 outlines the core elements and general terms and conditions of the program. Currently, no  
6 Missouri investor-owned utilities participate in the PAYS program.

7                   6. Infrastructure efficiency tariff: In the Responsive Report, Staff explains its  
8 review, including a discussion of CCOS studies, customer-related distribution revenue  
9 requirement ranges, and customer-related distribution facilities. Staff notes the Commission's  
10 inquiry requires a level of data not currently available to Staff, and a set of assumptions not  
11 typically made in designing rates. Staff expects to continue discussions with Ameren Missouri  
12 concerning identification of specific areas to be targeted for redevelopment both in the St. Louis  
13 area and throughout its service territory. Staff recommends that if a volumetric or monthly  
14 bill-based discount is to be implemented, such discount be proportionate to the functionalized  
15 customer-related distribution costs for each broad category of class, applied as a percentage to  
16 the customer's monthly bill after application of all other applicable surcharges, discounts and  
17 riders. For Ameren Missouri, Staff recommends a discount of approximately 2% for residential  
18 customers, 2% for SGS customers and .5% for all other customer classes. Staff recommends  
19 Ameren Missouri modify its facility extension tariff provisions to more fully consider the  
20 incremental costs a customer causes to a system in determining how much, if any, customer  
21 advance is required.

22           Q.     Does this conclude your direct testimony?

23           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 Increase        )  
Its Revenues for Electric Service                    )            Case No. ER-2016-0179

**AFFIDAVIT OF NATELLE DIETRICH**

STATE OF MISSOURI        )  
  )  
COUNTY OF COLE         )            ss.

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

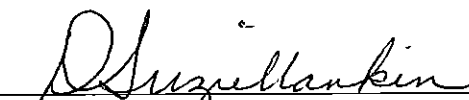
Further the Affiant sayeth not.

  
\_\_\_\_\_  
**NATELLE DIETRICH**

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 22<sup>nd</sup> day of December, 2016.

D. SUZIE MANKIN  
Notary Public - Notary Seal  
State of Missouri  
Commissioned for Cole County  
My Commission Expires: December 12, 2020  
Commission Number: 12412070

  
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Notary Public