

## **MEMORANDUM**

TO: Missouri Public Service Commission Official Case File,  
Case No. EE-2013-0009, Union Electric Company d/b/a Ameren Missouri

FROM: Michael L. Stahlman, Energy Unit - Tariffs / Rate Design Section

/s/ Daniel I. Beck 08/06/12  
Engineering Analysis Section / Date

/s/ Jeffrey A. Keevil 08/06/12  
Staff Counsel's Department / Date

Subject: Staff Report and Recommendation Regarding the Application of Union Electric Company d/b/a Ameren Missouri for an Order Changing Testing Requirements for Two Phase, Three Wire, 120/208V Meters

Date: August 6, 2012

## **OVERVIEW**

On July 3, 2012, Union Electric Company d/b/a Ameren Missouri (Ameren Missouri or Company) filed an Application and a Request for a Variance with the Missouri Public Service Commission seeking authority to use statistical sample testing of network meters. The Commission ordered the Staff of the Missouri Public Service Commission (Staff) to file a recommendation regarding its examination and analysis of Ameren Missouri's Application no later than August 6, 2012. On July 24, 2012, Ameren Missouri filed a Motion to Accept Filing of Corrected Schedule D.

## **BACKGROUND**

On August 26, 1974, Union Electric Company filed an Application in Case No. 18,172 seeking permission to depart from certain requirements of Rule 32 of the Commission's General Order No. 20 ("Rule 32"), which is now codified as 4 CSR 240-10.030(28). This rule, specifically 4 CSR 240-10.030(28)(C), requires utilities to test induction-type meters manufactured since 1937 at least every 240 months (every 20 years).

The Company sought the variance since sampling with MIL standards would save a substantial amount of testing cost while improving the overall quality of the single-phase meter system by indentifying distorted meter groups and isolating these distorted groups in a much smaller time frame than required by the then-present meter testing program. On March 12, 1975, the Commission approved the Company's Application.

In Case No. EO-2001-521, filed on March 3, 2001, the Company requested approval to change from the MIL standards sampling technique approved in Case No. 18,172 discussed above to the American National Standard Institute Sampling Procedures and Tables for Inspection by Attributes and by Variables (ANSI Standards), which is a modernization of the MIL Standards. The Commission approved the Company's Second Application in an order dated September 11, 2001.

In the current case, Ameren Missouri requests the Commission extend that variance to include two phase, three wire, 120/208V meters (hereinafter referred to as "network meters") used primarily for apartment complexes and similar buildings in order to provide single phase service for residential customers. Ameren Missouri proposes to use the same sample testing procedure for its network meters as was previously approved for single phase meters in Case No. EO-2001-521, which utilizes a standardized statistical sampling technique as set forth in the ANSI Standards.

### **DISCUSSION**

Ameren Missouri estimates that the total cost to individually test all of the approximately 32,000 network meters in Missouri would be approximately \$1,087,000. For the proposed Sample Testing of Two-Phase Network meters, Ameren Missouri will establish 6 different sample groups based on manufacturer and model types. Ameren Missouri

samples meters based on the last digit of the year installed that matches the last digit of the current year. For example, in 2013 Ameren Missouri will draw samples from meter populations that were installed in 2003, 1993, 1983, etc. Thus, every meter is subject to possible sample testing every 10 years, which is more often than 4 CSR 240-10.030(28)(C) requires. For these 6 sample groups, a total of approximately 1,892 meters will need to be sample tested over the next 10 years, resulting in an average 189 meters annually. Ameren Missouri estimates this plan to cost approximately \$6,420 per year or \$64,200 over the 10-year period. Over the comparable 20 year period, since the Company's sample size is approximately 12 percent of the total meters, Ameren Missouri should save approximately 88 percent of the cost while also increasing the periodicity of testing.

Commission Rule 4 CSR 10.030(29) allows each customer to request testing of their meter at no charge, provided that the meter has not been tested within the last twelve (12) months. This provides Ameren Missouri customers an opportunity to have their individual meter tested without cost if they question the accuracy of the meter.

Additionally, Ameren Missouri's conversion of network meters to automatic meter reading (AMR) beginning in 1996 resulted in all of these meters being tested for accuracy when purchased as a new meter with the AMR module installed or when a used meter was retrofitted with an AMR module.

#### **STAFF RECOMMENDATION**

Staff recommends that the Commission grant Ameren Missouri's requested variance to extend the ANSI sampling procedure as described above to include two phase, three wire, 120/208V meters. Staff has verified that Ameren Missouri has filed its annual report and is not delinquent on any assessment.

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

In the Matter of the Application of	)	
Union Electric Company d/b/a Ameren	)	
Missouri for an Order Changing Testing	)	Case No. EE-2013-0009
Requirements for Single Phase Meters	)	

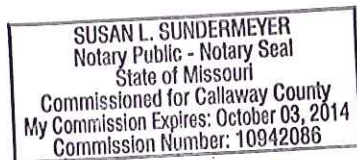
**AFFIDAVIT OF MICHAEL STAHLMAN**

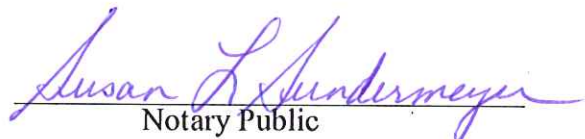
STATE OF MISSOURI     )  
                                      ) ss  
COUNTY OF COLE     )

Michael Stahlman, of lawful age, on oath states: that he participated in the preparation of the foregoing Staff Recommendation in memorandum form, to be presented in the above case; that the information in the Staff Recommendation was provided to him; that he has knowledge of the matters set forth in such Staff Recommendation; and that such matters are true to the best of his knowledge and belief.

  
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Michael Stahlman

Subscribed and sworn to before me this 6<sup>th</sup> day of August, 2012.



  
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Notary Public