

Exhibit No.:
Issues: LED Street Lighting
Witness: Hojong Kang
Sponsoring Party: MO PSC Staff
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MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

SURREBUTTAL TESTIMONY

OF

HOJONG KANG

UNION ELECTRIC COMPANY

d/b/a

Ameren Missouri

FILE NO. ER-2012-0166

*Jefferson City, Missouri
September 2012*

Staff Exhibit No. 226
Date 9-27-12 Reporter KF
File No. ER-2012-0166

EXHIBIT 226

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

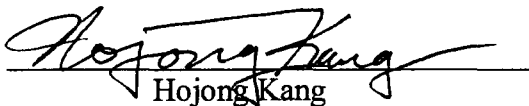
In the Matter of Union Electric Company)
d/b/a Ameren Missouri's Tariffs to)
Increase Its Revenues for Electric Service)

Case No. ER-2012-0166

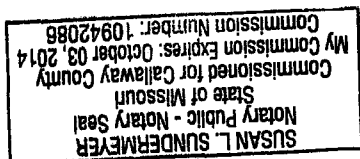
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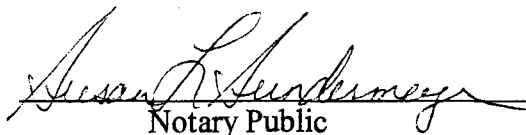
STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Hojong Kang, of lawful age, on his oath states: that he has participated in the preparation of the following Surrebuttal Testimony in question and answer form, consisting of 4 pages of Surrebuttal Testimony to be presented in the above case, that the answers in the following Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.


Hojong Kang

Subscribed and sworn to before me this 10 day of September, 2012.




Notary Public

1 A. In its July 13, 2011 *Report and Order*, "...the Commission agreed with Staff
2 that LED street lighting is an exciting technology that should be examined and implemented if
3 appropriate.¹" The Commission directed "...Ameren Missouri to either file an LED street
4 lighting tariff by July 31, 2012, or to provide a status report to Staff by that date, indicating
5 when it will be able to file such a tariff.²" Further, the Commission emphasized that
6 "...Ameren Missouri does not have to file a tariff until it is appropriate to do so. If its further
7 study of the potential of LED street lighting reveals that such lighting will not be a benefit to
8 its customers, Ameren Missouri may inform the Staff of that conclusion in its status report.³"

9 Q. Did Ameren Missouri file a LED street lighting tariff by July 31, 2012?

10 A. No, it did not. The Company provided a short "*Report to Staff*" on July 31,
11 2012, that is attached to my rebuttal testimony as Schedule HJK-R1. In its *Report to Staff*,
12 Ameren Missouri stated that it expects the Electric Power Research Institute ("EPRI") to
13 publish its nationwide LED street lighting pilot program report in September 2012, which
14 included testing of eleven (11) LED street lights in the city of Ballwin, Missouri. Ameren
15 Missouri also stated that it "...has not determined it is appropriate to offer a LED tariff at this
16 time. There are still a plethora of issues that the Company must resolve before a [LED] tariff
17 can be offered.⁴" Ameren Missouri's list of issues includes regulatory framework issues,
18 initial costs, operation issues, procurement issues, lighting types, and cost-effectiveness.

19 Q. Did Ameren Missouri describe what it views as the regulatory framework
20 issues?

21 A. No, it did not. Staff issued its Data Request No. 0476 and requested, in part:

¹ File No. ER-2011-0028, *Report and Order*, p. 94.

² *Id.*

³ *Id.*

⁴ Rebuttal Testimony Schedule HJK-R1, *Report to Staff*, p. 1.

1 b. The complete list of regulatory framework issues that Ameren Missouri and
2 the Commission still have to address; and c. Ameren Missouri's plan for
3 addressing the complete list of regulatory framework issues that Ameren
4 Missouri and the Commission still have to address.

5
6 In its response to Staff's data request, the Company stated:

7 B. A complete list of regulatory framework issues has not been developed.

8 C. Ameren Missouri is still conducting analysis to address all items above. A
9 specific plan does not exist.

10
11 Q. Please describe the LED street lighting research project Ameren Missouri is
12 currently involved in.

13 A. As mentioned above, Ameren Missouri is collaborating with EPRI and other
14 utilities to test and evaluate the potential of currently available LED lighting through EPRI's
15 National Demonstration Project, which includes nine (9) national sites with twelve (12) LED
16 lights normally installed per site. However, Ameren Missouri installed eleven (11) LED
17 lights in Ballwin, Missouri. This project started in the summer of 2009 and ended in the
18 fourth quarter of 2011. As a project participant, Ameren Missouri is interfacing with EPRI
19 for data collection in metering and photometric measurement of the LED lighting. EPRI will
20 provide a final report in September 2012. This research with EPRI is Ameren Missouri's only
21 LED street lighting research.

22 Q. Does Staff know of any other LED street lighting research projects involving
23 other Missouri utilities?

24 A. Yes. Kansas City Power & Light ("KCPL") and KCP&L Greater Missouri
25 Operations ("GMO") have several LED pilot programs in their service territories. KCPL and
26 GMO participated in not only the EPRI project, which Ameren Missouri has, but also its own
27 pilot program and the project with the Mid-America Regional Council ("MARC").
28 Furthermore, KCPL and GMO cooperate with the city of Kansas City, Missouri, and other

1 cities to install municipal LED street lights. With these pilot projects, KCPL and GMO have
2 installed more than 2,200 LED street lights and are expected to install more than 4,000 high
3 efficiency street lights in total by December, 2012.

4 The Empire District Electric ("Empire") has a LED street lighting pilot program in
5 Branson, Missouri.

6 Q. Does Staff have a recommendation for the Commission regarding Ameren
7 Missouri's response to the Commission's order regarding LED street lighting?

8 A. Yes. The Commission's *Report and Order* in Case No. ER-2011-0028 found
9 that "Ameren Missouri is not as enthusiastic about the future of LED lighting" as Staff. Staff
10 has concerns that this may create delays in Ameren Missouri's analysis and implementation of
11 a LED lighting tariff. Staff recommends that the Commission order Ameren Missouri to: 1)
12 complete its evaluation of all issues⁵ the Company identified in its *Report to Staff* not later than
13 January 31, 2013 and 2) file either a compliance LED lighting tariff, or a status report as to
14 when it anticipates filing such tariff, not later than March 31, 2013. Staff is not
15 recommending that Ameren Missouri offer a LED street lighting demand-side program unless
16 Ameren Missouri's analysis shows that a LED street lighting demand-side program would be
17 cost-effective. Staff further recommends that Ameren Missouri file a proposed tariff sheet(s)
18 that would provide LED street lighting services at cost plus the return authorized by the
19 Commission to its customers.

20 Q. Does this conclude your rebuttal testimony?

21 A. Yes, it does.

⁵ Rebuttal Testimony Schedule HJK-R1, *Report to Staff*, p. 1.