

Exhibit No. 7

Exhibit No.:
Issue(s): *Surge Protection
Program*
Witness: *Amanda Coffe*
Sponsoring Party: *MoPSC Staff*
Type of Exhibit: *Rebuttal Testimony*
Case No.: *ET-2021-0082*
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MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

ENGINEERING ANALYSIS DEPARTMENT

REBUTTAL TESTIMONY

OF

AMANDA COFFER

**UNION ELECTRIC COMPANY,
d/b/a AMEREN MISSOURI**

CASE NO. ET-2021-0082

*Jefferson City, Missouri
February 2021*

1 Q. In Mr. Schneider's testimony, he was asked to elaborate on the specific problem
2 the Program will address. Do you have anything to say about his response?

3 A. His response is misleading. He notes that "Every piece of electrical equipment
4 is designed to operate at a specified nominal voltage. While electrical equipment can handle
5 minor variations from this nominal voltage, the equipment will suffer damage from surges that
6 originate from outside the home, which are many times more than the minor variations the
7 equipment is designed to handle." The term "electrical equipment" used here is misleading
8 since the limited manufacturer's warranty only covers motor driven household equipment.

9 Q. What does Mr. Schneider say in his testimony regarding lightning-related
10 electrical surges?

11 A. He states "According to the National Lightning Safety Institute, it is estimated
12 that damage due to electrical surges is one of the leading causes of failure of electrical
13 equipment, with damage due to lightning alone estimated to cost the U.S. economy \$5-6 billion
14 dollars every year. As noted, the Company's system is designed to minimize this risk but it
15 simply cannot prevent all surges, especially in a state like Missouri, which ranks in the top 10 of
16 most "lightning struck" states in the United States. ". However, the additional Program terms
17 outlined in the tariff pages submitted by Ameren Missouri specifically state that the device
18 cannot offer protection from surges caused by lightning strikes to the home or property.

19 Q. In his testimony, Mr. Schneider discusses the existence of similar surge
20 protection programs. Do you have anything to say about the other programs?

Rebuttal Testimony of
Amanda Coffey

A. In response to DR 0002, Ameren Missouri submitted information about similar surge protection programs offered by several other companies, including a program offered by Evergy. The main difference between Ameren Missouri's proposed Program and the others, is that none of the programs Ameren Missouri provided for comparison are regulated.

The table below shows the information provided by Ameren Missouri in DR 0002, along with the information for the proposed Ameren Missouri Surge Protection Program for comparison:

Utility Name	Price per month	Coverage Limits	Covered Items	Term & Change Provisions
Florida Power and Light	\$10.95 for SPD \$10.95 for warranty \$15.95 for both	\$5,000 per item, \$5,000 annual, \$100,000 lifetime for SPD and \$5,000 for electronics	SPD - motor driven, warranty - electronic	30 day tem length, no cancellation fee
Duke Energy	\$7.99 for SPD \$2.99 for warranty	\$10,000 lifetime for SPD \$2,000 annual for additional warranty	SPD - motor driven, warranty-electronic	30 day term length, no cancellation fee, \$60 removal fee if not on program for 24 months
Evergy	\$5.95 for \$500 per item, \$5,000 annual; \$7.95 for \$1000 per item, \$10,000 annual & basic interior wire protection (\$500 claim limit)		"Cord and Plug" connected appliances and electronics	No term length, \$150 cancellation fee if not on program 24 months
Georgia Power	\$9.95	\$5,000 per item, \$5,000 per occurrence, \$100,000 lifetime	Motor driven	No term length, no cancellation fee
Ameren Missouri	\$9.95	\$5,000 per appliance, \$5,000 per occurrence, \$50,000 lifetime	Motor driven	24 month term, cancellation fee equal to the remaining cost of term

In comparison with the other programs, Ameren Missouri's proposed program has a much longer term length and a potentially heftier cancellation fee. Some of the compared programs have no term length and no cancellation fee whereas Ameren Missouri's proposed program has

1 a two (2) year term length and cancelling participants would have to pay for the remaining cost
2 of service for the term. Not to mention some of the other programs have higher coverage limits
3 and would cover electronics and motor driven appliances whereas the proposed Program would
4 only cover motor driven appliances.

5 Q. In his testimony, Mr. Schneider indicates that customers have expressed
6 desire for such a program through market research performed using Ameren Missouri's
7 online residential panel. Do you have any concerns about the results of Ameren Missouri's
8 market research?

9 A. Yes. Ameren Missouri's survey responses indicate that the "Whole Home"
10 language and branding was preferred by customers because it implied encompassing
11 protection¹. However, surge protection devices can only protect against surges that originate
12 upstream of the device, and surges can originate from inside or outside the home. The device
13 offered by the Program will not protect against surges that originate from inside the home
14 because the device will be located at the meter. In other words, the proposed device will only
15 protect against surges coming from Ameren Missouri's equipment.

16 To obtain "whole home" protection from surges would require a combination of surge
17 protection devices. One of the questions in Ameren Missouri's survey also specifically asked
18 if the person ever experienced an electrical surge in their home that damaged electrical
19 equipment, such as a refrigerator, AC unit, stereo equipment, TV, dishwasher, or computer
20 without any clarifying information. This could easily confuse customers into believing all of
21 those items would be covered, but as previously noted, not all of those items would be protected
22 under the limited manufacturer's warranty.

¹ April 24 Surge Branding Presentation provided in response to OPC DR 1102, page 14.

1 The market research performed by Ameren Missouri also did not mention to whom the program
2 would be available. Ameren Missouri's Surge Protection Program will not be available to
3 customers that have been disconnected for nonpayment for electric service within 12 months
4 preceding their application². The market research never presented information on disqualifying
5 factors to the online residential panel. Admittedly, the focus of the survey was to garner interest
6 around surge protection; however, Ameren Missouri's omission of proposed program design,
7 specifically which residential customers may enroll, could have influenced the customer interest
8 referenced in Mr. Schneider's testimony.

9 Q. Are there other options the average consumer might consider other than
10 the Program?

11 A. Yes. While the average consumer has likely heard of power strip surge
12 protectors, people may not be aware of the other types of products that are available. There are
13 several options divided into three distinct types of surge protection devices available on the
14 market, which provide different levels of protection, all of which consumers can
15 purchase independently at a range of prices. Many of these devices also come with a
16 manufacturer's warranty and none of them come with a monthly fee. These devices can be
17 purchased at the local hardware store or ordered online from vendors such as Amazon. The
18 three types of surge protection devices are described in the table below, along with some options
19 for each type that I found available for purchase on the Lowe's website.

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21
22 See table on next page

² Ameren Missouri's proposed tariff sheet 166.

Rebuttal Testimony of
Amanda Coffey

Type 1	Installed before the main breaker or at the main breaker	Protects against larger surges. Some smaller surges could still pass through. May require installation by an electrician.	Square D 36 kA Single Phase Panel Mounted Type 1 Surge Protector \$44.98 Square D 80 kA Home Electronic Protective Device \$115
Type 2	Installed at the main breaker	Similar to Level 1. Capable of guarding against larger and smaller surges. Can be installed by the user.	Square D SurgeBreaker 22 kA Indoor Surge Protective Device \$60.98 Eaton General Use Surge Protector \$73.98
Type 3	Installed at point of use	Most common and inexpensive. Come in several forms including power strips and models that are designed to look like a common outlet.	Project Source 6 Outlet Power Strip \$3.97 Southwire 3-Outlet Surge Tap with USB Ports \$10.67

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Q. If the Commission found the program was needed, what recommendations would you make to improve the program?

A. Whether offered on an unregulated basis or as a program subject to the authority of this Commission, I recommend Ameren Missouri develop and make available to its customers a robust set of frequently asked questions (FAQ) that addresses the specifics of the program, and educational resources that cover power surges and the different types of surge protection devices available outside the program, in addition to its marketing materials.

Q. Does that conclude your rebuttal testimony?

A. Yes, it does.

Amanda Coffey

Present Position:

I am an Associate Engineer in the Engineering Analysis Department, of the Industry Analysis Division of the Missouri Public Service Commission.

Educational Background and Work Experience:

I received my Bachelor of Science in Chemical Engineering from the University of Missouri in 2012. I was employed by the Missouri Department of Natural Resources as an Environmental Engineer from 2015 through 2018. I have been employed by the Commission since 2018.

Case History:

Case Number	Utility	Type	Issue
EC-2020-0252	Evergy West	Electric	Formal Complaint
EO-2019-0315	KCPL	Electric	RES Compliance Report
EO-2019-0317	KCPL	Electric	RES Compliance Plan
EO-2019-0396	City of Gallatin	Electric	Addendum to Territorial Agreement
EO-2020-0060	Farmers' Electric	Electric	Territorial Agreement
EO-2020-0329	Evergy Metro	Electric	RES Compliance
EO-2020-0331	Evergy Metro	Electric	RES Compliance
EO-2020-0341	Evergy Metro	Electric	Vegetation Management Report
EO-2020-0342	Evergy West	Electric	Vegetation Management Report
EO-2021-0001	Empire	Electric	Reliability Compliance Report
ET-2021-0082	Ameren	Electric	Surge Protection Program
SA-2019-0161	United Services	Sewer	Depreciation
SR-2019-0157	S.K.&M.	Sewer	Depreciation
EA-2020-0371	Ameren	Electric	CCN Application Requirements
EO-2021-0163	SEMO	Electric	Change of Supplier