

Exhibit No.:

*Issue(s): Charge Ahead –
Electric Vehicles and
Business Solutions Programs*

Witness: Byron M. Murray

Sponsoring Party: MoPSC Staff

Type of Exhibit: Surrebuttal Testimony

Case No.: ET-2018-0132

Date Testimony Prepared: November 16, 2018

MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION

TARIFF/RATE DESIGN DEPARTMENT

SURREBUTTAL TESTIMONY

OF

BYRON M. MURRAY

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

CASE NO. ET-2018-0132

*Jefferson City, Missouri
November 2018*

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OF
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1 **SURREBUTTAL TESTIMONY**
2 **OF**
3 **BYRON M. MURRAY**
4 **UNION ELECTRIC COMPANY,**
5 **d/b/a AMEREN MISSOURI**
6
7 **CASE NO. ET-2018-0132**

8 Q. Please state your name and business address.

9 A. My name is Byron M. Murray, MPA, and my business address is
10 Missouri Public Service Commission, 200 Madison St., Jefferson City, MO 65101.

11 Q. Did you file rebuttal testimony in this case?

12 A. Yes, I filed rebuttal testimony regarding Union Electric Company d/b/a
13 Ameren Missouri's ("Ameren Missouri") requested Charge Ahead program.

14 **EXECUTIVE SUMMARY**

15 Q. What is the purpose of your Surrebuttal Testimony in this proceeding?

16 A. The purpose of my Surrebuttal Testimony is to address the issue of smart
17 connect charging stations and the issue of stranded assets, as addressed in the
18 Rebuttal Testimony of Mr. James Ellis, filed on behalf of ChargePoint, and Dr. Geoff Marke
19 who filed Rebuttal Testimony on behalf of The Office of the Public Counsel ("OPC"),
20 respectively.

21 **SMART METERS AND SMART EV CHARGING STATIONS**

22 Q. Have you reviewed Mr. Ellis' Rebuttal Testimony?

23 A. Yes.

1 Q. What information does Mr. Ellis provide regarding the capabilities of smart,
2 connected EV charging stations provided by Charge Point?

3 A. On page 7 of Mr. Ellis' Rebuttal Testimony, he states the following:

4 "Smart" EV charging stations is a broad term, but generally refers
5 to the electric vehicle supply equipment ("EVSE") having at least
6 the ability to meter electricity passing through the unit, provide
7 load management and scheduled charging features, provide for
8 point of use payment and access control, and incorporate two-way
9 communication from the EVSE to the driver as well as the station
10 operator.

11 Q. Does Mr. Ellis provide information regarding how the EVSE capabilities
12 mentioned above can be helpful to utilities?

13 A. Yes, also on page 7, Mr. Ellis further states:

14 These capabilities can be of significant importance to a utility as it
15 can provide a wealth of information related to charging behaviors
16 and load profiles and enable various program designs, including
17 demand side management.

18 Q. Has Ameren Missouri required chargers installed through the program to
19 include demand response, storage, or other features that may benefit the Ameren Missouri
20 system going forward?

21 A. No. Ameren Missouri has not included any requirements for the chargers
22 installed through the program that would benefit the distribution system in the way described
23 in the testimony of Mr. Ellis. The program doesn't require the EV charging stations to be
24 smart or connected to a network for communication with the utility for Demand Response
25 programs even though the rebates will be funded by ratepayers.

1 Q. Should the EV charging stations funded through Ameren Missouri rebate
2 program require the installation of EV charging stations that are smart and connected to the
3 utility for communication and demand response programs?

4 A. To benefit ratepayers' long term, the EV charging Stations must be capable of
5 communicating with the utility and able to participate in demand response programs or even
6 facilitate use of the EV batteries for storage. If the Ameren Missouri program is approved
7 largely as proposed, Staff recommends an element of site selection include a preference for
8 sites or customers that will install equipment consistent with future smart grid options.

9 Q. Dr. Geoff Marke, on behalf of OPC, expresses concerns with the risk of
10 charging stations installed by KCPL and GMO in their Clean Charge Network becoming
11 stranded assets due to the technology being new and currently developing.¹ Does Staff share
12 this concern?

13 A. Staff is concerned that the EV charging stations installed under
14 Ameren Missouri's proposed program may become stranded assets. If the Company does not
15 consider future smart grid options, ratepayers would still be required to pay for the costs of
16 the program without receiving the level of benefit assumed by Ameren Missouri. In addition,
17 any future Time of Use rates implementation for EV charging stations will be dependent on
18 the installation of smart meters and smart charging stations. Either EV charging stations
19 would not be includable in Time of Use rates or demand response programs, or the charging

¹ ET-2018-0132 Rebuttal Testimony of Geoff Marke, page 16: There is no question EV charging is a developing technology. EV charging stations can become stranded assets when new technologies are introduced and nimble companies out-compete incumbent utilities. Regulated electric utilities are then exposed to the risk of having stranded assets on their books. Failure to account for changing technologies may result in ratepayers funding assets that are outdated are no longer useful or useful to customers.

Surrebuttal Testimony of
Byron M. Murray

1 stations would have to be replaced or upgraded with new hardware and software to be
2 functional for such purposes.

3 Q. Does this complete your Surrebuttal testimony?

4 A. Yes it does. A summary of Staff's recommendations in this matter is provided
5 in the Surrebuttal testimony of Robin Kliethermes.

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)
 Approval of Efficient Electrification Program) Case No. ET-2018-0132

AFFIDAVIT OF BYRON M. MURRAY

STATE OF MISSOURI)
)
 COUNTY OF COLE) ss.

COMES NOW BYRON M. MURRAY and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Surrebuttal Testimony*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.




BYRON M. MURRAY

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 15th day of November 2018.

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



 Notary Public