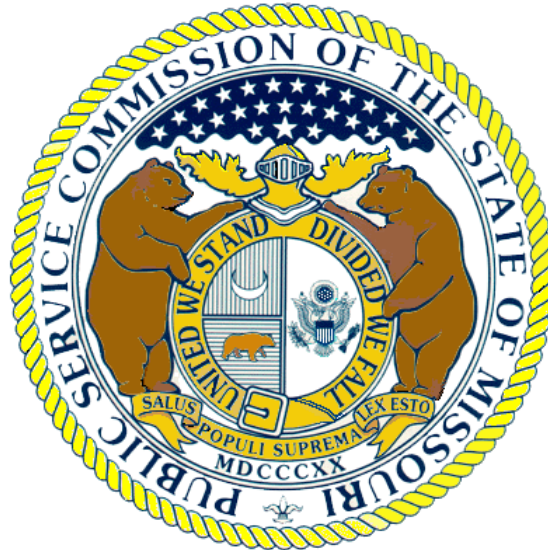


**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**



In the Matter of the Application of Union )  
Electric Company d/b/a Ameren Missouri ) **File No. ET-2018-0132**  
For Approval of Efficient Electrification ) Tariff Tracking Nos. YE-2018-0104  
Program ) and YE-2018-0105

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**REPORT AND ORDER**

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**Issue Date:** February 6, 2019

**Effective Date:** February 16, 2019

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OF THE STATE OF MISSOURI**

In the Matter of the Application of Union )  
Electric Company d/b/a Ameren Missouri ) **File No. ET-2018-0132**  
For Approval of Efficient Electrification ) **Tariff Tracking Nos. YE-2018-0104**  
Program ) **and YE-2018-0105**

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**SENIOR REGULATORY LAW JUDGE:** Nancy Dippell

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## **REPORT AND ORDER**

The Missouri Public Service Commission, having considered all the competent and substantial evidence upon the whole record, makes the following findings of fact and conclusions of law. The positions and arguments of all of the parties have been considered by the Commission in making this decision. Failure to specifically address a piece of evidence, position, or argument of any party does not indicate the Commission has failed to consider relevant evidence, but indicates rather that the omitted material was not dispositive of this decision.

### **Procedural History**

On February 22, 2018, Union Electric Company d/b/a Ameren Missouri (“Ameren Missouri” or “Company”) filed an application and accompanying tariff sheets seeking approval of two new tariffed programs that are collectively referred to as the “Charge Ahead” program. The application also sought approval of modifications to Ameren Missouri’s existing distribution system extension procedures, variances from portions of the Commission’s regulations regarding promotional practices, and a request for authority to use a deferral accounting mechanism for cost recovery of the Charge Ahead program. Tariff sheets to implement the programs were submitted as separate filings as follows: line extension tariff (Tariff Tracking No. YE-2018-0103); Charge Ahead – Business Solutions (Tariff Tracking No. YE-2018-0104); and Charge Ahead – Electric Vehicles (Tariff Tracking No. YE-2018-0105). The proposed tariff sheets bore an effective date of April 23, 2018.

The Commission issued notice of the application and granted the intervention requests of the Department of Economic Development -- Division of Energy (“DE”), the

Natural Resources Defense Council (“NRDC”), Renew Missouri Advocates d/b/a Renew Missouri, the Sierra Club, Spire Missouri Inc., the Missouri Industrial Energy Consumers (“MIEC”), ChargePoint, Inc., Kansas City Power & Light Company (“KCP&L”), KCP&L Greater Missouri Operations Company (“GMO”), and The Empire District Electric Company. The Staff of the Missouri Public Service Commission (“Staff”) filed a recommendation and a request for hearing on April 3, 2018.

On April 5, 2018, the Office of the Public Counsel (“Public Counsel”) filed a motion to dismiss the application and reject the tariffs. On April 12, 2018, the Commission suspended the tariffs for 120 days from their original effective date of April 23, 2018, until August 21, 2018. Responses to the motion to dismiss were received and on May 2, 2018, the Commission denied the motion. On May 24, 2018, after receiving a proposed procedural schedule from the parties, the Commission further suspended the tariffs for an additional six months until February 21, 2019.

A nonunanimous stipulation and agreement with regard to the line extension policy was filed on October 4, 2018, and it was amended on October 12, 2018. The stipulation and agreement has been approved by a separate Commission order.

The parties filed written direct, rebuttal, and surrebuttal testimony and provided a list of remaining issues for Commission determination. An evidentiary hearing was held on December 4-5, 2018. Thereafter, the parties filed initial briefs on January 7, 2019, and reply briefs on January 17, 2019. Additionally, the Missouri Petroleum Marketers & Convenience Store Association (“MPCA”) was allowed to file an *amicus curiae* brief.

## **I. Jurisdiction and Standard for Decision**

### **Findings of Fact**

1. Ameren Missouri is a Missouri certificated electrical corporation as defined by Subsection 386.020(15), RSMo 2016, and is authorized to provide electric service to portions of Missouri.

2. Ameren Missouri filed an application and accompanying tariff sheets on February 22, 2018, seeking approval of two new tariffed programs that are collectively referred to as the “Charge Ahead” program. The application also sought approval of modifications to Ameren Missouri’s existing distribution system extension procedures, variances from portions of the Commission’s regulations regarding promotional practices, and a request for authority to use a deferral accounting mechanism to recover the costs of the Charge Ahead program.

3. The Charge Ahead program as proposed consists of two separate targeted incentive offerings: the Charge Ahead – Electric Vehicles Program (Tariff Tracking No. YE-2018-0105) and the Charge Ahead – Business Solutions Program (Tariff Tracking No. YE-2018-0104).

### **Conclusions of Law**

A. Ameren Missouri is an “electrical corporation”<sup>1</sup> and “public utility”<sup>2</sup> and, thus, is subject to the supervision of the Commission.<sup>3</sup>

B. The Commission has been vested, as part of its enacting statutes, with all

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<sup>1</sup> Subsection 386.020(15), RSMo., 2016. (All statutory references are to the Revised Statutes of Missouri 2016 unless otherwise noted.)

<sup>2</sup> Subsection 386.020(43), RSMo.

<sup>3</sup> Subsections 393.140(1) and 386.250(1), RSMo.

power and authority to carry out and fully effectuate its purpose.<sup>4</sup> That authority extends to “such other and further extent, and to all such other and additional matters and things, and in such further respects as may herein appear, either expressly or impliedly.”<sup>5</sup>

C. The courts have affirmed the breadth of this authority<sup>6</sup> finding it “referable to the police power of the state.”<sup>7</sup> Moreover, the Commission’s powers are flexible “to meet changing conditions, as the commission, in its discretion, may deem to be in the public interest.”<sup>8</sup>

D. As part of the Commission’s general supervision of electrical corporations, Subsection 393.130.1, RSMo., provides that every electrical corporation must “furnish and provide such service instrumentalities and facilities as shall be safe and adequate and in all respects just and reasonable. . . . [A]ny service rendered or to be rendered shall be just and reasonable and not more than allowed by law or by order or decision of the commission.”

E. Subsection 393.150.1, RSMo., authorizes that whenever an electrical company files with the Commission “any schedule stating a new rate or charge, or any new form of contract or agreement, or any new rule, regulation or practice relating to any rate, charge or service or to any general privilege or facility,” the Commission may conduct an investigation and hearing to determine “the propriety of such rate, charge, form of contract or agreement, rule, regulation or practice[.]”

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<sup>4</sup> Section 386.040, RSMo.

<sup>5</sup> Subsection 386.250(7), RSMo.

<sup>6</sup> See, e.g., *State ex rel. Pitcairn v. Pub. Serv. Comm'n*, 111 S.W.2d 982, 986 (Mo. App. 1937) (“[The legislature] thereby vested the commission with certain positive powers, expressly conferred, and also vested it with all others necessary and proper to carry out fully and effectually all such powers so delegated, and necessary to give full effect to the act.”).

<sup>7</sup> *State ex rel. Chicago, R. I. & P. R. Co. v. Pub. Serv. Comm'n*, 312 S.W.2d 791, 796 (Mo. 1958).

<sup>8</sup> *State ex rel. Chicago, R. I. & P. R. Co. v. Pub. Serv. Comm'n*, 312 S.W.2d 791, 796 (Mo. 1958).



F. Subsection 393.140(2), RSMo., gives the Commission power to:

. . .order such reasonable improvements *as will best promote the public interest, preserve the public health and protect* those using such gas, electricity, water, or sewer system, and those employed in the manufacture and distribution thereof, and have power to order reasonable improvements and extensions of the works, wires, poles, pipes, lines, conduits, ducts and other reasonable devices, apparatus and property of gas corporations, electrical corporations, water corporations, and sewer corporations.<sup>9</sup>

G. In 4 CSR 240-14 (“Chapter 14”), the Commission has promulgated rules to regulate the promotional practices of a utility. The proposed Charge Ahead programs are promotional practices as defined by 4 CSR 240-14.010(6)(L). As such, a determination of whether these promotional practices should be authorized is determined by the promotional practices standards found at 4 CSR 240-14.030 as follows:

(1) All promotional practices of a public utility or its affiliate shall be just and reasonable, reasonable as a business practice, economically feasible and compensatory and reasonably calculated to benefit both the utility and its customers.

(2) No public utility or its affiliate, directly or indirectly, in any manner or by any device whatsoever, shall offer or grant to any person any form of promotional practice except as is uniformly and contemporaneously extended to all persons in a reasonable defined class. No public utility or its affiliate, in the granting of a promotional practice, shall make, offer or grant any undue or unreasonable preference or advantage to any person or subject any person to any undue or unreasonable prejudice or disadvantage. . . .

H. The parties did not clearly set out the legal standard under which the Commission should make a decision regarding the Charge Ahead programs presented by Ameren Missouri. The issues list asks merely whether the Commission should “accept, reject, or modify” the proposals. The issues list also questions whether Ameren

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<sup>9</sup> Emphasis added.

Missouri has shown that the programs are needed and if they are cost effective. However, the parties do not agree that a showing of need or cost-effectiveness is required.<sup>10</sup>

I. Under the Commission's broad powers to supervise and regulate public utilities, it has the authority to approve or reject incentive programs or promotional practices such as those presented by Ameren Missouri. The Commission has the power to supervise the services provided by an electrical corporation to see that those services are safe and adequate.<sup>11</sup> The Commission exercises this power by investigating, examining, and hearing evidence on proposed tariff changes for new rates and services of those electrical corporations.<sup>12</sup>

J. Further, the Commission has promulgated rules to implement its supervisory powers with regard to promotional practices. Thus, the Commission will evaluate the Charge Ahead programs under the standards set out in Chapter 14 of the Commission's rules.

## **II. Issues as Defined by the Parties**<sup>13</sup>

### **1. Should the Commission approve, reject, or modify Ameren Missouri's Charge Ahead – Electric Vehicles Program?**

**a. Has Ameren Missouri provided sufficient evidence that there is a need for the program?**

**b. Has Ameren Missouri provided sufficient evidence that the program is cost effective?**

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<sup>10</sup> See the position statements and briefs of the parties.

<sup>11</sup> Section 393.130, RSMo.

<sup>12</sup> Section 393.140, RSMo.

<sup>13</sup> File No. ET-2018-0132, *List of Issues, List and Order of Witnesses, Order of Opening Statements and Order of Cross-Examination* (filed Nov. 20, 2018).

Although the parties set out the above as separate issues, they are so interrelated that the Commission will address them together below.

### **Findings of Fact**

1. The stated purpose of the Charge Ahead – Electric Vehicles Program (“EV Charging Program”) “is to stimulate the development of infrastructure within the Company’s service territory that is needed to support widespread adoption of electric vehicles by the public.”<sup>14</sup> The Company proposed to accomplish this by providing targeted incentive offerings to private persons or entities to overcome the initial market barriers to deployment of this charging infrastructure.<sup>15</sup>

2. The EV Charging Program consists of four independent sub-programs: corridor charging; multi-family charging; public charging (also known as “around town charging”); and workplace charging.<sup>16</sup>

3. The proposed tariff sheets set a combined incentive limit of \$11 million for all four sub-programs and set a cap for each of the four sub-programs. However, a provision for fund reallocation between sub-programs is available after two years. The EV Charging Program is also limited to a five-year duration.<sup>17</sup>

4. The Multi-Family Charging Sub-Program has a budget of \$4.4 million for providing incentives to the owners of multi-family residential premises so that the property owner can provide EV charging to its residents.<sup>18</sup> There is a \$5,000 or 50% of the total

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<sup>14</sup> Tariff Tracking No. YE-2018-0105, Sheet No. 165.

<sup>15</sup> Tariff Tracking No. YE-2018-0105, Sheet No. 165.

<sup>16</sup> Tariff Tracking No. YE-2018-0105, Sheet No. 165.

<sup>17</sup> Tariff Tracking No. YE-2018-0105, Sheet No. 165.1.

<sup>18</sup> Tariff Tracking No. YE-2018-0105, Sheet Nos. 165.3 and 165.4.

project cost per charging port cap and up to 10 ports may be funded at a single residential property with multiple dwelling units.<sup>19</sup>

5. The Public Charging Program has a budget of \$1.1 million for providing incentives to promote the deployment of EV charging stations that are accessible to the general public. This sub-program would provide limited incentives to owners of non-residential premises that are available to the public including, retail establishments, rest areas, parks, entertainment venues, gas stations, and public parking lots.<sup>20</sup>

6. The Workplace Charging Program has a budget of \$1.1 million and would provide for incentives to promote the deployment of EV charging infrastructure that is accessible in workplaces for employees, visitors, and fleet vehicles.<sup>21</sup>

7. The Corridor Charging Sub-Program has a budget of \$4.4 million and would provide for the development of a public minimum practical network of EV charging infrastructure, including Level 3 DCFC,<sup>22</sup> along the highway corridors throughout the Company's service territory. The sub-program is designed with a reverse auction approach to determine the amount of incentives that would be available for each site with a cap of \$240,000 per site, or \$360,000 per site for charging ports with a capacity of 150 kW or greater. Items eligible for incentives are the line extension, demand mitigation solutions, "Make Ready"<sup>23</sup> costs, and the upfront cost of charging equipment.<sup>24</sup> This

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<sup>19</sup> Tariff Tracking No. YE-2018-0105, Sheet Nos. 165.3.

<sup>20</sup> Tariff Tracking No. YE-2018-0105, Sheet Nos. 165.4 and 165.5.

<sup>21</sup> Tariff Tracking No. YE-2018-0105, Sheet Nos. 165.5 and 165.6.

<sup>22</sup> Direct Current Fast Charging ("DCFC") is commonly referred to as "Level 3 charging" or "fast charging" and utilized to quickly recharge EVs, with a common power rating of 50kW or higher.

<sup>23</sup> "Make Ready" is defined in the tariff as "infrastructure incurring substantial costs to identify, acquire and develop sites and structures to facilitate the installation of EV Charging Infrastructure." Tariff Tracking No. YE-2018-0105, Sheet No. 165.

<sup>24</sup> Tariff Tracking No. YE-2018-0105, Sheet No. 165.2.

reverse auction allows for the competitive market to determine the amount of incentive necessary to actually build the charging station.

8. Of approximately 5.6 million vehicles registered in the state of Missouri in 2016, only about 4,450 were EVs. Even though Missouri's EV adoption rate is low compared to other states (Missouri is 34<sup>th</sup> out of 50 states),<sup>25</sup> the number is on the rise and there is a growing market trend toward purchasing EVs.<sup>26</sup>

9. The Company's Integrated Resource Plan ("IRP") contemplated load growth from EV adoption. In the IRP the Company's base forecast was that there would be almost 25,000 electric vehicles in its service territory by 2028. The increased adoption rate for 2017 is in line with this forecast.<sup>27</sup>

10. Even without Ameren Missouri's Charge Ahead programs, by 2030, Missouri is projected to have roughly 201,000 EVs in the state.<sup>28</sup> That level of EV adoption will require more charging infrastructure and providing incentives will likely encourage greater EV adoption in the near-term.<sup>29</sup>

11. Several other states (including Ohio, Utah, California, and Massachusetts) recognize the need for utilities to facilitate EV adoption using charging infrastructure incentives.<sup>30</sup> Additionally, states with supportive EV policies have greater EV adoption rates than those without such policies.<sup>31</sup>

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<sup>25</sup> Exhibit 2, Justis Direct, pages 10-13; and Ex. 6, Wills Direct, p. 20, Figure 3.

<sup>26</sup> Ex. 300, Kelley Rebuttal, p. 5.

<sup>27</sup> Ex. 6, Wills Direct, p. 28.

<sup>28</sup> Ex. 651, Ellis Surrebuttal, pp. 5-6, citing National Renewable Energy Laboratory. "National Plug-In Electric Vehicle Infrastructure Analysis." September 2017, p. 51.  
<https://www.nrel.gov/docs/fy17osti/69031.pdf>.

<sup>29</sup> Ex. 651, Ellis Surrebuttal, pp. 5-6.

<sup>30</sup> Ex. 2, Justis Direct, pp. 15-17, Table 2; and Ex. 6, Wills Direct, pp. 41-43; Ex. 650, Ellis Rebuttal, pp. 15-16; and Ex. 651, Ellis Surrebuttal, p. 3. See also, Transcript pp. 279-280.

<sup>31</sup> Ex. 2, Justis Direct, pp. 13-14.

12. Three key barriers to EV adoption are: a lack of consumer awareness and understanding of EV performance; the initial cost; and a lack of sufficient and suitable charging infrastructure.<sup>32</sup>

13. The lack of sufficient EV charging infrastructure can make purchasing an EV in rural or suburban areas less feasible and make traveling long distances or through the state of Missouri impractical.<sup>33</sup> This “range anxiety” is a significant barrier to EV adoption.<sup>34</sup>

14. Creating a sufficient charging network throughout Ameren Missouri’s territory and the state as a whole decreases “range anxiety” by giving consumers the confidence that they can safely travel in their EV throughout the state and be able to charge the EV as needed. Thus, decreasing “range anxiety” should increase EV adoption by removing this barrier.<sup>35</sup>

15. Ameren Missouri’s market research through its “Request for Information,” along with other studies and sources, supports a finding that without financial assistance, public fast charging along Missouri’s highway corridors is not feasible for the private sector and will not be feasible anytime soon.<sup>36</sup>

16. To spur EV adoption growth in the most efficient manner, a “holistic charging ecosystem” (the ability to charge at home, at work, and public, including highway corridors) is needed.<sup>37</sup>

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<sup>32</sup> Ex. 2, Justis Direct, p. 20; Ex. 300, Kelley Rebuttal, p. 4; and Tr. pp. 307-309.

<sup>33</sup> Ex. 300, Kelley Rebuttal, pp. 4-6; and Ex. 651, Ellis Surrebuttal, p. 8.

<sup>34</sup> Tr. pp. 106 and 269.

<sup>35</sup> Ex. 2, Justis Direct, p. 14.

<sup>36</sup> Ex. 2, Justis Direct, pp. 28-29; Ex. 3, Justis Surrebuttal, p. 14; Ex. 300, Kelley Rebuttal, p. 7; and Ex. 7, Willis Surrebuttal, pp. 52-53.

<sup>37</sup> Ex. 2, Justis Direct, pp.24, 28-29; and Ex. 300, Kelley Direct, pp. 6-7.

17. The KCP&L and GMO Clean Charge Network has been effective in spurring growth in the EV adoption rate in the Kansas City area.<sup>38</sup> Statistics show that the Kansas City area was in the top two or three cities nationwide for EV growth during 2016 and had the highest EV growth rate in the United States for the 4<sup>th</sup> Quarter of 2016 and the 1<sup>st</sup> Quarter of 2017.<sup>39</sup>

18. The Missouri EV Collaborative<sup>40</sup> identified and generally mapped out the need for 40 charging stations along Missouri's highways in order to have a minimum practical network.<sup>41</sup>

19. As a result of Volkswagen's ("VW") settlement from its diesel engine testing scandal, the entire state of Missouri may gain six of these needed highway corridor charging stations through funding from VW's Electrify America plan.<sup>42</sup> The Missouri EV Collaborative recommended spending the Electrify America funds on those charging stations.<sup>43</sup> Additionally, there may be another \$6 million from the VW Trust available over the next 10 years. These VW Electrify America and VW Trust funds will be controlled by the Missouri Department of Natural Resources and are not guaranteed to be awarded for the purpose of building EV charging stations.<sup>44</sup>

20. The most effective way to deploy EV charging stations statewide in a timely manner would be to use all funding sources in combination.<sup>45</sup>

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<sup>38</sup> Ex. 3, Justis Surrebuttal, pp. 12-14.

<sup>39</sup> Ex. 2, Justis Direct, p. 31.

<sup>40</sup> The Missouri EV Collaborative is an informal group of environmental advocates and utilities in Missouri led by Ameren Missouri.

<sup>41</sup> Ex. 3, Justis Surrebuttal, pp. 6-7; specifically Fig. 3. (Figure 3 was marked as "Exhibit 8" for demonstrative purposes during Ameren Missouri's opening statement at the hearing. Thus, references in the briefs to Exhibit 8 are also references to Exhibit 3, page 7, Figure 3.)

<sup>42</sup> Ex. 3, Justis Surrebuttal, pp. 6-7; and Ex. 102, Murray Rebuttal, pp. 3-4.

<sup>43</sup> Ex. 3, Justis Surrebuttal, p. 6.

<sup>44</sup> Ex. 3, Justis Surrebuttal, p. 6.

<sup>45</sup> Ex. 301, Kelley Surrebuttal, p. 5

21. At least one state agency, the Missouri Department of Economic Development - Division of Energy, has recognized the benefits of increasing the number of charging stations in Missouri and increasing the number of EVs as published in the Missouri Comprehensive State Energy Plan in October 2015. The plan also acknowledges that electric utilities are in a position to support EV infrastructure because of the interrelation of EV charging stations with the electric grid.<sup>46</sup>

22. The electric service needs of Ameren Missouri's customers are evolving as demonstrated by the trend toward EV adoption in the state and nationally and the growing number of automakers that are aggressively ramping up EV production.<sup>47</sup>

23. Having more EVs on Missouri highways has local environmental and health benefits including cleaner local air because of no exhaust emissions or petroleum spills or leaks.<sup>48</sup> Additionally, EVs can have other environmental benefits from the use of renewable sources to produce the electricity.<sup>49</sup>

24. Incentives for EV charging hardware and installation represent an efficient, low-risk model that will encourage long-term electric vehicle adoption.<sup>50</sup>

25. Incentive-based programs can provide fast deployments of charging stations, competitive choice for customers, and low administrative burdens to utilities and customers.<sup>51</sup>

26. Financial benefits from an EV charging network accrue to both the utility and the ratepayers. Utilities and ratepayers benefit economically from the improved

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<sup>46</sup> Ex. 2, Justis Direct, p. 9; citing the Missouri Comprehensive State Energy Plan at p. 104.

<sup>47</sup> Ex. 2, Justis Direct, p. 22; and Ex. 6, Wills Direct, pp. 19 and 31-33.

<sup>48</sup> Ex. 2, Justis Direct, pp. 6-7; Ex. 4, Pickles Direct, p. 7, and Tr. p. 114.

<sup>49</sup> Ex. 300, Kelley Rebuttal, p. 8.

<sup>50</sup> Ex. 650, Ellis Rebuttal, pp. 3-4.

<sup>51</sup> Ex. 650, Ellis Rebuttal, p. 14.



utilization of fixed assets when charging is done in off-peak times. EVs are considered to be a flexible load that can charge during periods when demand is low.<sup>52</sup>

27. The financial benefits to the utility and to the ratepayer from an EV charging network are not merely from the additional electricity sales at the charging stations, but are also obtained through additional electric sales from charging at home and creating more efficient utilization of the electric grid.<sup>53</sup> All ratepayers ultimately will receive those benefits from the spreading of fixed costs over a greater amount of usage creating rates that are lower than if there was less usage.<sup>54</sup>

28. Ameren Missouri estimated the gross revenues for charging one EV at an incremental margin of \$259 per year. This calculation was made using the rate schedule for the residential class of customers.<sup>55</sup>

29. Ameren Missouri performed a ratepayer impact measure (“RIM”) test to determine the cost effectiveness of the EV Charging Program. The result was a RIM of 1.19, meaning that for every \$1.00 spent on program incentives, the utility would produce \$1.19 in revenue.<sup>56</sup>

30. Staff, through its witness Sarah L. K. Lange, calculated various scenarios to show what the margin per EV might be and how it would change depending on the assumptions used and on which rate class (residential, small general services (SGS), or large general services (LGS)) the electricity was sold.<sup>57</sup> Ms. Lange’s calculations were not meant to reflect the exact value that Staff thought was the appropriate margin to use,

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<sup>52</sup> Ex. 6, Wills Direct, p. 21; Ex. 300, Kelley Rebuttal, p. 8; and Tr. p. 283.

<sup>53</sup> Ex. 7, Wills Surrebuttal, p. 13-14.

<sup>54</sup> Ex. 3, Justis Surrebuttal, pp. 13-14; and Ex. 7, Wills Surrebuttal, p. 13-14.

<sup>55</sup> Ex. 6, Wills Direct, pp. 25-26; and Ex. 101, Lange Rebuttal, p. 5.

<sup>56</sup> Ex. 6, Wills Direct, p. 34.

<sup>57</sup> Ex. 101, Lange Rebuttal, pp. 6-7.

but rather to demonstrate that Ameren Missouri's estimate of the impact to ratepayers is not reasonable because of its assumptions.<sup>58</sup>

31. Ameren Missouri provided no break down per sub-program of the estimated margin per EV.<sup>59</sup> This lack of detail in the margin calculation is not a reasonable assumption given the great fluctuations in the margin per EV if the calculation is done using different rate classes. Further, it is not reasonable to assume in the calculation that charging for the public and workplace sub-programs (and possibly the multi-family sub-program) will take place in a residential rate class.<sup>60</sup>

32. Additionally, Ameren Missouri's assumption used in the calculation of the margin per EV that each EV will be driven 40 miles per day and that charging will not be split between workplace and home has no support.<sup>61</sup>

33. Ameren Missouri also assumed that only 20% of EVs will be charging during system peak conditions, which is inconsistent with the avoided costs projected in its 2019 Missouri Energy Efficiency Investment Act ("MEEIA") application and may not be a reasonable assumption for all programs.<sup>62</sup>

34. Further, in its margin calculations, Ameren Missouri gave no consideration for the possibility of Time of Use ("TOU") rates, the timing of future rate cases in determining how quickly net revenues generated by EV charging will benefit other ratepayers, or any consideration for the cost to comply with the Renewable Energy Standard associated with the associated load growth.<sup>63</sup>

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<sup>58</sup> Ex. 101, Lange Rebuttal.

<sup>59</sup> Ex. 101, Lange Rebuttal. p. 11-12; and Tr. p. 457.

<sup>60</sup> Ex. 101, Lange Rebuttal, pp. 6-9.

<sup>61</sup> Ex. 101, Lange Rebuttal, pp. 8-9.

<sup>62</sup> Ex. 101, Lange Rebuttal, pp. 9-10.

<sup>63</sup> Ex. 6, Wills Direct, p. 35; and Ex. 101, Lange Rebuttal, pp. 2-4.

35. Because so many inputs and assumptions in Ameren Missouri's calculations are unreasonable, unsupported, or unknown, the Commission cannot find that the Public Charging Program, Workplace Charging Program, or Multi-Family Charging Sub-Program are reasonable or in the public interest.

36. Even accepting Ameren Missouri's RIM test results for the EV program as a whole, 80-90% of the charging, and therefore the revenue from the electricity sales, is expected to occur at the EV owner's home.<sup>64</sup> Thus, if only the electricity sales from the corridor charging stations were considered the RIM test result would be negative indicating less revenue than the cost. This means it is unlikely that the electricity sales from the corridor charging stations themselves will produce a "cost effective" program when measuring only revenue from electric sales of the corridor charging stations.

37. The goal of the program, however, is to transform the EV market by removing as many barriers to EV adoption as possible in order to increase the number of EVs that will ultimately be doing most of their charging at home during off-peak hours.<sup>65</sup> It is not the goal to make a profit off sales of electricity from each individual charger.<sup>66</sup> Thus, the program need not be financially cost effective to be successful. In this type of pilot program, even if the sales of electricity from the corridor charging stations do not completely compensate for the entire cost of the program, the other benefits, such as decreasing "range anxiety" and, thereby, increasing EV adoption, can justify the expense.

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<sup>64</sup> Ex. 651, Ellis Surrebuttal, p.7, citing, Department of Energy. "Charging at Home." <https://www.energy.gov/eere/electricvehicles/charging-home>; and Ex. 2, Justis Direct, p. 29.

<sup>65</sup> Ex. 7, Wills Surrebuttal, pp. 14-15.

<sup>66</sup> Ex. 3, Justis Surrebuttal, p. 16.

## **Conclusions of Law**

A. Section 393.130, RSMo., prohibits an electrical corporation from granting “any undue or unreasonable preference or advantage” or causing “any undue or unreasonable prejudice or disadvantage . . . .”

B. Pursuant to Section 393.140, RSMo., and 4 CSR 240-14.0303(3), Ameren Missouri must include in its tariffs incentive programs such as the proposed Charge Ahead programs.

C. The Commission has promulgated regulations at Chapter 14 to govern promotional practices by utilities. That regulation requires that all promotional practices, such as the Charge Ahead programs “be just and reasonable, reasonable as a business practice, economically feasible and compensatory and reasonably calculated to benefit both the utility and its customers.”<sup>67</sup> Additionally, that regulation requires that the programs be offered or granted “uniformly and contemporaneously . . . to all persons in a reasonable defined class”<sup>68</sup> and must not “offer or grant any undue or unreasonable preference or advantage to any person or subject any person to any undue or unreasonable prejudice or disadvantage. . . .”<sup>69</sup>

## **Decision**

Ameren Missouri has presented the Charge Ahead – EV Program in order to provide incentives to private persons or entities to develop EV charging stations within its service territory. Ameren Missouri argued that the Charge Ahead - EV Program is needed because the free market alone will not develop the holistic charging infrastructure that is

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<sup>67</sup> 4 CSR 240-14.0303(1).

<sup>68</sup> 4 CSR 240-14.0303(2).

<sup>69</sup> 4 CSR 240-14.0303(2).

needed to spur widespread EV adoption and meet the electric service needs of those that have been adopted. The Commission agrees, in part, but finds that the evidence supports finding that only the EV Charging Corridor Sub-Program meets all the criteria needed for approval and is in the public interest.<sup>70</sup> The other Charge Ahead sub-programs (public, workplace, and multi-family) may be needed and may provide some benefits, but that does not necessarily lead to the conclusion that incentive payments to select customers to implement those programs is an appropriate use of ratepayer funds.

The goal of each of the EV charging sub-programs is a good one. It was shown that if a sufficient number of EVs are adopted, there could be substantial benefits for the utility, ratepayers, and possibly even the environment, especially if those EVs are charged at times when the electric grid is underutilized. However, because so many inputs and assumptions in Ameren Missouri's calculations were unreasonable, unsupported, or unknown, the Commission cannot determine how many EVs would be supported, at what cost, and whether the same vehicle would be counted multiple times because it is charging at home and at work.

While it is acceptable to make assumptions and the numbers do not have to be 100% certain for the Commission to approve a small pilot program, the evidence presented leaves too many questions about the margin per EV, the numbers of EVs the program will encourage, and how many EVs the incentivized chargers would be able to serve for the Commission to find that the Public Charging Program, Workplace Charging Program, or Multi-Family Charging Sub-Program are appropriate promotional practices, even on a relatively small scale program. Without confidence that these sub-programs

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<sup>70</sup> See, 4 CSR 240-14.030(1) and (2).

will increase EV adoption rates, the Commission cannot find they are reasonable or in the public interest.

With regard to the EV Charging Corridor, however, other benefits besides the addition of load in off-peak hours will accrue to ratepayers, the Company, and to the general public by encouraging a more rapid build out of an EV charging corridor along Missouri's highways. The evidence shows that there are already a number of EVs in the state of Missouri and that the number is expected to grow. However, the evidence also showed that there is significant "range anxiety" as there is not a reliable network on the main travel corridors in Missouri to support EV travel to all parts of the state. This is one of the key deterrents to purchasing an EV. Once that "range anxiety" is diminished, it is very likely that more people will adopt this technology. Greater adoption will likely contribute to home charging during off-peak hours on a regular basis and provide a more efficient grid utilization to the benefit of both the Company and the ratepayers.

The evidence showed that without financial incentives, it is not feasible at this time for the private sector to implement public fast charging stations along Missouri's highway corridors anytime soon. Significantly, the Clean Charge Network has increased the EV adoption rate in the Kansas City area by providing a greater charging network. Additionally, providing these utility incentives now so that they can work in conjunction with the other statewide plans that may be forthcoming (such as VW Electrify America) encourages a more efficient and coordinated statewide EV charging network. It is worthwhile that Ameren Missouri is involved in planning for a statewide placement of these charging stations because such placement could affect the utilization of the grid as

a whole, but especially within Ameren Missouri's service territory with its very diverse populations.

The EV Charging Corridor Sub-Program is also reasonable and economically feasible because it is limited in cost at \$4.4 million, it is limited to five years, and it is limited in the amount of incentive payment per site. Further, while the immediate benefit of this incentive program will be to the people that can afford and desire to purchase an EV in Ameren Missouri's service territory, it is in the public interest to allow this pilot program to go forward as it will not create an undue prejudice or disadvantage to other ratepayers given its relatively small size.

The Commission finds that the EV Charging Corridor Sub-Program is "just and reasonable, reasonable as a business practice, economically feasible and compensatory, and reasonably calculated to benefit both the utility and its customers."<sup>71</sup> The Commission also finds that the EV Charging Corridor Sub-Program will "not offer or grant any undue or unreasonable preference or advantage" or "subject any person to an undue or unreasonable prejudice or disadvantage."<sup>72</sup> For these reasons, the Commission finds the EV Charging Corridor Sub-Program to be in the public interest.

**c. If the program is approved, what is the appropriate cost recovery mechanism?**

Having approved the EV Charging Corridor Sub-Program above, the Commission will address the appropriate cost recovery mechanism as it relates only to that sub-program.

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<sup>71</sup> 4 CSR 240-14.030(1).

<sup>72</sup> 4 CSR 240-14.030(2).

## Findings of Fact

1. Three cost recovery options for the EV Charging Corridor Sub-Program were presented to the Commission.

2. Staff proposed that if the EV Charging Program was approved, the appropriate cost recovery mechanism was to incorporate the appropriate amount of expenses for the program in rates in Ameren Missouri's next rate case like any other traditional expense item.<sup>73</sup>

3. Ameren Missouri requested that the Commission defer the program incentives and certain associated administrative costs to a regulatory asset so that the Company could request inclusion of an amortization of the deferred sums in revenue requirement over a seven-year period in future rate proceedings.<sup>74</sup> Ameren Missouri specifically did not want to include the unamortized balance of the regulatory asset in rate base in future rate cases.<sup>75</sup>

4. Under Ameren Missouri's cost recovery proposal, Ameren Missouri would provide the funds for the program between rate cases and would offset the carrying costs for those funds by retaining the revenues from any additional electricity sales.<sup>76</sup>

5. By not seeking rate base treatment of the regulatory asset, Ameren's proposal would align the interests of the Company and its customers because the Company has no incentive to pay program incentives to charging station owners unless

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<sup>73</sup> Ex. 103, Oligschlaeger Rebuttal, p. 5.

<sup>74</sup> Ex. 6, Wills Direct, pp. 40-54.

<sup>75</sup> Ex. 6, Wills Direct, p. 44.

<sup>76</sup> Ex. 6, Wills Direct, pp. 44-45 and 48.



the resulting charging stations will create more widespread EV adoption and, in turn, produce incremental electricity sales.<sup>77</sup>

6. Public Counsel proposed that if the Commission approved Ameren Missouri's EV Charging Program, the appropriate cost recovery method would be the one laid out in Ameren Missouri's application but with the incorporation of a "performance based recovery" mechanism.<sup>78</sup>

7. Public Counsel's proposal focuses on the metric of how many EVs are sold in Ameren Missouri's service territory as compared to the baseline number included in Ameren Missouri's forecast.<sup>79</sup> In this performance metric, Ameren Missouri would not recover any of its costs until that baseline number was exceeded.<sup>80</sup>

8. Ameren Missouri's baseline forecast of the number of additional EVs that would be purchased as a result of the Charge Ahead Program in its service territory was based on the assumption of approval of its entire Charge Ahead – EV Program. This estimate was not broken down by sub-program and it cannot be determined whether a particular EV was purchased as a result of the charging stations being deployed in the one sub-program that is being approved.<sup>81</sup>

9. Other states including Utah, Ohio, and Massachusetts allow utilities to recover EV incentive program costs through rider-like mechanisms (essentially on a single-issue basis).<sup>82</sup> This provides the utility its costs returned more contemporaneously

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<sup>77</sup> Ex. 6, Wills Direct, pp. 44-46.

<sup>78</sup> Ex. 200, Marke Rebuttal, pp. 20-22.

<sup>79</sup> Ex. 200, Marke Rebuttal, pp. 20-22.

<sup>80</sup> Ex. 7, Wills Surrebuttal, p. 69.

<sup>81</sup> Ex. 6, Wills Direct, pp. 30-34.

<sup>82</sup> Ex. 6, Wills Direct, p. 43.

with the expenditure.<sup>83</sup> However, because of Missouri’s prohibition on single-issue ratemaking, Ameren Missouri will not be able to recover the costs of the program between rate cases without a deferral mechanism.

10. Under Ameren Missouri’s proposal, deferring the program cost recovery also serves to “sync up” the costs of the program with the benefits or revenues of the added load and provides “a smoother pattern of rate impacts to” ratepayers.<sup>84</sup> This is a benefit to the ratepayers.<sup>85</sup>

11. As explained by Staff’s witness Mark Oligschlaeger:

Deferral accounting is the practice of treating certain financial impacts as a “deferred asset/liability” or “regulatory asset/liability” on a utility’s balance sheet in lieu of charging the cost as a period revenue or expense item on the utility’s income statement as would normally be required under the Uniform System of Accounts (USOA) adopted by the Commission for accounting purposes. For purposes of utility ratemaking, deferral treatment is often employed to allow a utility the opportunity to obtain full rate recovery of particular costs at a later time even though the cost was not incurred within an ordered test year, update period or true-up period in a general rate case.<sup>86</sup>

12. Typically the Commission finds that an “extraordinary event” (one that is unique, unusual, and non-recurring) has occurred before authorizing deferred accounting treatment. The classic example of extraordinary events giving rise to deferral requests are natural disasters.<sup>87</sup> This type of deferral mechanism, usually concerning a past event, is often referred to as an “accounting authority order” or “AAO.”<sup>88</sup>

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<sup>83</sup> Ex. 6, Wills Direct, p. 54. See also, the description of the other states’ recovery mechanisms at pp. 42-43.

<sup>84</sup> Ex. 6, Wills Direct, pp. 52-53.

<sup>85</sup> Ex. 6, Wills Direct, p. 52.

<sup>86</sup> Ex. 103, Oligschlaeger Rebuttal, pp. 3-4.

<sup>87</sup> Ex. 103, Oligschlaeger Rebuttal, p. 4.

<sup>88</sup> Tr. p. 479.

13. The Commission also uses another type of deferral accounting mechanism referred to as a “tracker.” Unlike AAOs, trackers tend to concern ongoing costs for which there is a public policy interest. The criteria that the Commission has utilized for approving trackers has differed from the criteria it follows for an AAO.<sup>89</sup>

14. The Commission has approved deferral accounting on many occasions without a finding of an “extraordinary event.”<sup>90</sup> The Commission has often authorized a deferral mechanism when it is authorizing a new program that is beneficial to customers, but where without the deferral mechanism in place, it could be financially detrimental to the utility to pursue.<sup>91</sup>

15. If the Commission uses normal accounting procedures for the EV Charging Corridor Sub-Program, the costs of the program will be charged as an expense in the year that they occur. The only way for this type of cost to be included in the Company’s revenue requirement for ratemaking would be for the expense to occur in the test year. If Ameren Missouri files a rate case in 2019, these expenses are not likely to fall within the test year.<sup>92</sup>

16. Without a deferred accounting mechanism, Ameren Missouri would “lose” the opportunity to request recovery of a portion of the program costs if it chose to implement that program before it files a rate case.<sup>93</sup> Thus, the loss of this portion of the

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<sup>89</sup> Tr. pp. 479-480.

<sup>90</sup> Ex. 7, Wills Surrebuttal, pp. 55-56. (Citing numerous occasions when the Commission has authorized a “tracker” without making a finding of an “extraordinary event.” See for example, File Nos. ET-2018-0063, ER-2012-0166, and ER-2014-0351.)

<sup>91</sup> Ex. 7, Wills Surrebuttal, p. 56.

<sup>92</sup> Tr. pp. 480-482.

<sup>93</sup> Tr. p. 482.

program costs may cause Ameren Missouri to delay innovative ideas and new programs until rate case proceedings. This will slow innovation and further complicate rate cases.<sup>94</sup>

17. Given the need for and benefits of the EV Charging Corridor Sub-Program (both financial and public interest benefits) and Ameren Missouri providing the financing costs associated with the incentive costs, it is reasonable to authorize a tracker.

18. Ameren Missouri calculated the positive regulatory lag amounts and the proposed amortization period based on implementing the entire EV Charging Program.<sup>95</sup> However, the Commission has only approved the EV Charging Corridor Sub-Program consisting of \$4.4 million of the \$11 million proposed.

19. Since the Commission did not approve the entire program and the calculations are not broken down by sub-program, the Commission cannot determine from the evidence presented what the appropriate amortization period would be if this expense is allowed to be amortized in the next rate case.

### **Conclusions of Law**

A. It is well settled in Missouri law that there is a prohibition against “single-issue ratemaking.” That is, the Commission may not allow a public utility to change an existing rate without consideration of all relevant factors such as operating expenses, revenues, and rates of return.<sup>96</sup>

B. The Commission may “prescribe uniform methods of keeping accounts, records and books to be observed by electrical corporations[.]”<sup>97</sup> Additionally, the

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<sup>94</sup> Ex. 7, Wills Surrebuttal, p. 57.

<sup>95</sup> Ex. 6, Wills Direct, pp. 46-51.

<sup>96</sup> *State ex rel. Mo. Water Co.*, 308 S.W.2d at 718-19; *State ex rel. Util. Consumers Council of Mo., Inc. v. Pub. Serv. Comm'n*, 585 S.W.2d 41, 56-58 (Mo. 1979).

<sup>97</sup> Subsection 393.140(4), RSMo.

Commission may “prescribe by order the accounts in which particular outlays and receipts shall be entered, charged or credited.”<sup>98</sup>

### **Decision**

The Commission has determined that the EV Charging Corridor Sub-Program is just, reasonable, and in the public interest. Synchronizing the program costs paid by the ratepayers with the revenues and the benefits produced is a benefit to the ratepayers in that it provides “a smoother pattern of rate impacts.”<sup>99</sup> Other states accomplish this cost recovery in a more contemporary manner with the provision of the programs through riders. However, Missouri has legal barriers to allowing recovery for these costs outside of a rate case.

The Commission found that it is in the public interest for the EV Charging Corridor Sub-Program to be implemented soon, so that it can be coordinated with other charging corridor funds available to the state of Missouri. Depending on the timing of future rate cases, without a deferral accounting mechanism, Ameren Missouri may not be able to recover in rates the expenses of this program. Additionally, if Ameren Missouri is uncertain about its opportunity to request recovery of these expenses, it may determine that it should wait to implement a program at a later date, which would slow the EV growth in the state that the Commission has found to be desirable and in the public interest. Further, by allowing the opportunity for Ameren to request the non-rate base treatment in a future rate case and retain any electricity sales revenues between rate cases, Ameren Missouri and the customers’ interests in the program become aligned. Thus, it is in the public interest to authorize a deferral accounting mechanism or tracker.

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<sup>98</sup> Subsection 393.140(8), RSMo.

<sup>99</sup> Ex. 6, Wills Direct, p. 52, Ins.18-19.

The Commission cannot make a ratemaking determination outside of a rate case. Ratemaking decisions must be made based on all the relevant factors, including whether costs and expenses were prudently incurred. Additionally, because the Commission has approved only one of the four sub-programs of the proposed EV Charging Program, the Commission cannot determine based on the evidence in this case, that seven years is an appropriate amortization period for these expenses. Therefore, the Commission will not authorize a seven-year amortization with this tracker or determine if these costs will be included in rates. Those determinations will instead be determined in a future rate case.

One benefit of a pilot program is that the Company and the Commission can get real-time experience and real data about the charging stations, how much electricity is actually sold, and whether such incentive programs are effective. In order to gain the most benefit from this program, in addition to the tracker of accounting information, the Commission will direct Ameren Missouri to separately track the amount of any additional electricity sales from the corridor charging stations.

Public Counsel has proposed that a performance based metric be included in any tracking mechanism and cost recovery approved by the Commission. However, the Commission only approved one of four parts of the program upon which the evidence of expected performance is based. Further, it is impossible to determine if a particular EV in Ameren Missouri's service territory was purchased because of the EV Charging Corridor Sub-Program. Therefore, the Commission will not order a performance based metric as part of the tracker.

The Commission has authority to allow Ameren Missouri to use a tracker to track the EV Charging Corridor Sub-Program costs and administrative expenses to be

considered for recovery in future rate cases. Because it is reasonable and in the public interest to do so, given the considerations stated above, the Commission authorizes Ameren Missouri to use a deferral accounting mechanism to track the EV Charging Corridor Sub-Program costs and administrative expenses for possible recovery of those prudently incurred expenses in future rate cases.

**d. If the program is approved, what conditions, if any, should be imposed by the Commission?**

**Findings of Fact**

1. The Staff of the Commission did not recommend approval of any of the Charge Ahead programs. Instead, Staff recommended the Commission order Ameren Missouri to enter into a stakeholder process to develop and file a “Make Ready” tariff to facilitate installation of customer-owned electric vehicle charging stations.<sup>100</sup> Under such a tariff, Ameren Missouri would not require line extension charges from a customer seeking a line extension for separately metered EV charging that meets public policy considerations and are developed with stakeholder input and included in the tariff.<sup>101</sup> The subsidies under this approach would be limited to the line extension costs otherwise payable by the entity seeking to install the charger.<sup>102</sup>

2. Staff also recommended that if the Commission approved the EV Charging Corridor Sub-Program, the approval should be conditioned on the charging stations being placed in accordance with the charging stations represented as red dots (in Ameren Missouri’s service territory) in the *EV Collaborative Vision for Statewide Public Minimum*

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<sup>100</sup> Tr. p. 442.

<sup>101</sup> Ex. 100, *Staff Report on the Estimated Costs and Benefits of a Make Ready Tariff for Separately Metered EV Charging*, p. 1.

<sup>102</sup> Ex. 100, *Staff Report on the Estimated Costs and Benefits of a Make Ready Tariff for Separately Metered EV Charging*, p. 1.

*Practical Corridor Charging Network map.*<sup>103</sup>

3. The proposed EV Charging Program tariff states that to be considered in the program the charging station sites will be “located within one (1) mile of interstate or highway interchange . . . .”<sup>104</sup> The tariff also establishes a bidding process for the incentives which requires the Company to evaluate the merits of the bids and site locations proposed by the competitive marketplace.<sup>105</sup>

4. DE recommended allocating 10% of the total program budget towards charging deployment in underserved and low-income communities within Ameren Missouri’s service area. This allocation supports equitable access to charging stations for residents of these communities and those drivers traveling to or through these communities.<sup>106</sup>

5. ChargePoint requested that the Company be required to provide thorough reporting on the incentives provided, customers engaged, and buildout of EV charging infrastructure achieved.<sup>107</sup> Ameren Missouri has no objection to this condition.

6. The Sierra Club and NRDC also requested that Ameren be required to report metrics including: station utilization; prices paid by EV drivers; site host pricing models/strategies; equipment providers selected; installation costs by equipment provider; and outage incidents by equipment provider. The Sierra Club and NRDC recommended that the collected data should be reported annually to the Commission and made public for review by any interested party.<sup>108</sup> Ameren Missouri did not object to this

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<sup>103</sup> Ex. 3, Justis Surrebuttal, p. 7, Figure 3.

<sup>104</sup> Tariff Tracking No. YE-2018-0105, Sheet No. 165.2.

<sup>105</sup> Tariff Tracking No. YE-2018-0105, Sheet No. 165.2.

<sup>106</sup> Ex. 300, Kelley Rebuttal, pp. 10-11; and Ex. 301, Kelley Surrebuttal, pp. 4-6.

<sup>107</sup> Ex. 6, Wills Direct, p. 40.

<sup>108</sup> *Initial Brief of Sierra Club & Natural Resources Defense Council*, (filed January 7, 2019), pp. 9-10.



reporting requirement so long as it is required to only report the data that it actually obtains. Ameren Missouri noted that not all of the data requested will be available to the Company since the data will belong to the charging station owner.<sup>109</sup>

### **Conclusions of Law**

There are no additional conclusions of law for this issue.

### **Decision**

The Commission has considered the proposed conditions and modifications and determines the following.

#### Working Group

The Commission agrees with Staff that a stakeholder process is an appropriate avenue to evaluate potential mechanisms for facilitating installation of EV charging stations. Accordingly, the Commission will, by separate order, open a working group file wherein Staff, Ameren Missouri, and all other interested parties may evaluate such mechanisms. The Commission will further order its Staff to file a report summarizing the findings resulting from that process. Although the participants in the workshop process may consider and evaluate any additional mechanism they choose, the Commission will direct them to evaluate the following three mechanisms:

- 1) The model stipulated to by the parties and approved by the Commission in Kansas City Power & Light Company's last rate case,<sup>110</sup> where the company can own the charging stations and seek cost recovery through rates.
- 2) A "Make Ready" tariff proposal that includes an option to waive line extension charges from a customer seeking a line extension for separately metered EV charging that meets specific public policy considerations.

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<sup>109</sup> Ameren Missouri's Reply Brief, (filed January 17, 2019), pp. 65-66.

<sup>110</sup> File No. ER-2018-0145, In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service Non-unanimous Partial Stipulation and Agreement, *Order Approving Stipulations and Agreements*, (issued October 31, 2018), pp. 3-4.

3) An alternate incentive program where program parameters, implementation, and cost recovery would be evaluated and defined in the context of a future rate proceeding.

#### Placement of Corridor Charging Stations

Staff has recommended the Commission limit charging station sites under the EV Corridor Charging Sub-Program to the locations specified in the EV Collaborative's map. The tariff language requires a charging station in the EV Charging Corridor Sub-Program to be located within one mile of an interstate or highway interchange. The tariff also establishes a bidding process by which Ameren Missouri will award the incentives to private entities based on the merits of the bids, including site location.

The Commission will not specify precise locations for the charging stations placement as this is a business decision that needs to be made by the Company. Ameren Missouri has every reason to allocate the incentives in a prudent manner. Failure to do so would limit its ability to recover the incentive costs in a future rate case and it would limit the success of the program both financially and with regard to the goal of establishing an EV charging corridor in the state of Missouri. Therefore, the Commission denies Staff's request.

#### Equitable Access

DE recommended allocating 10% of the total program budget toward deploying charging stations in underserved and low-income communities within Ameren Missouri's service area to support equitable access to charging stations for residents of these communities and those drivers traveling to or through these communities. The Commission finds that equitable access is a desirable goal. However, the Commission only approved the highway corridor portion of the charging program. Thus, there are

already constraints on where the chargers can reasonably and prudently be placed to promote the goals of the program. The Commission will not add further constraints on the program at this time.

#### Data Collection and Reporting

ChargePoint, the Sierra Club, and NRDC requested the Commission condition the approval of the programs on Ameren Missouri being required to collect and report information about the program's implementation including: incentives provided; customers engaged; buildout of EV charging infrastructure achieved; station utilization; prices paid by EV drivers; site host pricing models/strategies; equipment providers selected; installation costs by equipment provider; and outage incidents by equipment provider. The Sierra Club and NRDC recommended that the collected data should be reported annually to the Commission and made public for review by any interested party. Ameren Missouri did not object to these reporting requirements so long as it is required to only report the data that it actually obtains, as it will not be the charging station owner. The Commission finds that requiring this type of annual report for the life of the program plus one year after its completion is reasonable and will provide valuable information on the success of the incentive program.

Therefore, the Commission will direct Ameren Missouri to provide an annual report on the incentive program by filing it in the current case file. Every attempt should be made to make the report a public document. However, if the report contains confidential information it may be filed in accordance with the Commission's rule regarding confidential information.<sup>111</sup> Ameren Missouri shall also include the amount of any

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<sup>111</sup> 4 CSR 240-2.135.

additional electricity sales from the corridor charging stations in this annual compliance filing.

**2. Should the Commission approve, reject, or modify Ameren Missouri's Charge Ahead – Business Solutions Program?**

**a. Has Ameren Missouri provided sufficient evidence that there is a need for the program?**

**b. Has Ameren Missouri provided sufficient evidence that the program is cost effective?**

**c. If the program is approved, what is the appropriate cost recovery mechanism?**

**d. If the program is approved, what conditions, if any, should be imposed by the Commission?**

Although the parties set out issues 2., 2.a., and 2.b. as separate issues, they are so interrelated that the Commission will address them together below. Additionally, as the Charge Ahead - Business Solutions (Business Solutions) program was not approved, the Commission has not addressed a cost recovery mechanism or suggested conditions for the program. The parties may include issues related to the Business Solutions program in its discussions in the Working Group ordered in this case.

**Findings of Fact**

1. Ameren Missouri's proposed Business Solutions program, is a pilot-program intended to allocate approximately \$7 million over five years<sup>112</sup> to encourage the adoption of certain qualifying electric-powered vehicles and equipment in place of technologies that would otherwise be powered by gasoline, diesel, or propane fuel

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<sup>112</sup> Ex. 4, Pickles Direct, Sch. DP-D2-31 (\$6.882 million); and Tariff Tracking No. YE-2018-0104, Sheet No. 166.

(internal combustion engines).<sup>113</sup>

2. Ameren Missouri conducted cost-effectiveness studies and a study of the market potential for various electric technologies in its service territory.<sup>114</sup> Thirteen different technologies were evaluated,<sup>115</sup> seven of which (forklifts, electric standby truck refrigeration units, truck stop electrification, pushback tugs, tugs/tow tractors, belt loaders, and ground power units (“GPUs”)) were selected for the Business Solutions program.<sup>116</sup> These types of equipment were selected in order to “test customer acceptance of the program and build the infrastructure necessary” to manage it.<sup>117</sup>

3. Utilities in other states are operating with incentive programs for these same kinds of electric-powered equipment and other state utility commissions have recognized the benefits of such programs.<sup>118</sup>

4. In support of the program, Ameren Missouri claimed it would provide benefits for both participants and nonparticipants. Ameren Missouri indicated that the benefits of the Business Solutions program include: reduced electric rates for all customers,<sup>119</sup> lower emissions,<sup>120</sup> lower total energy consumption and costs across fuels

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<sup>113</sup> Ex. 4, Pickles Direct, pp. 3-5; and Tariff Tracking No. YE-2018-0104, Sheet No. 166.

<sup>114</sup> Ex. 4, Pickles Direct, p. 10; and Schedule DP-D2.

<sup>115</sup> Ex. 4, Pickles Direct, pp. 11-13.

<sup>116</sup> Tariff Tracking No. YE-2018-0104, Sheet No. 166.1.

<sup>117</sup> Ex. 4, Pickles Direct, p. 17, Ins. 1-2.

<sup>118</sup> Ex. 4, Pickles Direct, p. 9 and Sch. DP-D2-8; and Ex. 5, Pickles Surrebuttal, pp. 6-8.

<sup>119</sup> Ex. 4, Pickles Direct, p. 5 and p. 8; Ex. 4, p. 5, l. 19; p. 8, ll. 14-18 (showing a positive RIM test cost-benefit ratio of 1.81 (\$1.81 of benefits for each dollar of program cost); Ex. 10, Table 2 (showing net benefits for each measure) and Schedule DP-D2-31 to Ex. 4 (showing net benefits using the RIM test of \$11.447 million, which equates to a 1.63 cost-benefit ratio using the RIM test; the net benefits are actually higher than \$11.447 million as evidenced by the revised 1.81 RIM cost-benefit ratio reported by Mr. Pickles in Ex. 4 at p. 6, l. 6-8). As Mr. Pickles explained, the originally-reported 1.63 was somewhat too low due to some transcription and copy/paste errors in the original spreadsheet that produced the numbers. Tr. p. 147, ll. 15-23.

<sup>120</sup> Ex. 4, Pickles Direct, p. 7.

for participants,<sup>121</sup> reduced operations and maintenance expenses,<sup>122</sup> and improved customer satisfaction.<sup>123</sup>

5. Ameren Missouri's own market assessment showed that in regard to forklifts there was already an adoption rate for electric equipment of 54%.<sup>124</sup>

6. With regard to GPUs, Ameren Missouri's market assessment showed 16 of 33 or 47% of the market equipment is already electric.<sup>125</sup>

7. "Free ridership" in the context of this program occurs when absent the incentive, the purchasing entity would have purchased an electric vehicle anyway.<sup>126</sup> This is concerning, because it means that the incentive was not needed. In a market that already has more than or close to 50% adoption of the technology "free ridership" is a concern.<sup>127</sup>

8. The other five electric equipment types do not have as significant market saturation. The market assessment showed the following number of electric units out of the total in the market: electric standby truck refrigeration units – 291 of 3,360 (8.6%); truck stop electrification – 39 of 1,237 (3%); pushback tugs – 0 of 31 (0%); tugs/tow tractors – 0 of 74 (0%), and belt loaders – 6 of 54 (11%).<sup>128</sup>

9. Ameren Missouri has not shown that it has sufficient procedures in place to determine before the incentives would be paid, that the incentives will not go to free

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<sup>121</sup> Ex. 4, Pickles Direct, p. 6. This is also demonstrated by the modified total resource cost (mTRC) results presented in Mr. Pickles' testimony. Ex. 4, Pickles Direct, pp. 8-9.

<sup>122</sup> Ex. 4, Pickles Direct, p. 5.

<sup>123</sup> Ex. 4, Pickles Direct, p. 5.

<sup>124</sup> Ex. 4, Pickles Direct, Schedule DP-D2-12.

<sup>125</sup> Ex. 4, Pickles Direct, Schedule DP-D2-14; and Ex. 102, Byron Murray Rebuttal, p. 5.

<sup>126</sup> Tr. p. 325.

<sup>127</sup> Ex. 200, Marke Rebuttal, pp. 7-10.

<sup>128</sup> Ex. 4, Pickles Direct, Schedule DP-D2-12 through DP-D2-15.

riders.<sup>129</sup> Ameren Missouri attempted to make changes to its tariff language by adding some of these checks and balances with language presented in its initial and reply briefs.<sup>130</sup> However, these proposals did not have the benefits of being fully vetted during the hearing process.

10. Based on its study results, Ameren Missouri would expect pay incentives for 2,465 eligible pieces of electric equipment over five years.<sup>131</sup>

11. Ameren presented a cost benefit analysis with its RIM test result of 1.81.<sup>132</sup> This means that for every \$1.00 spent on the program, Ameren Missouri expects to create \$1.81 in benefits.

12. The results of that RIM analysis hinge on assumptions regarding the number of pieces of electric equipment installed under various incentive types.<sup>133</sup> Specifically, the assumptions are 991 conventional forklifts, 498 truck stop electrification measures, 11 belt loaders, and 11 GPUs will be incentivized over five years.<sup>134</sup> The kilowatt hours (kWh) vary greatly from one type of equipment to another.<sup>135</sup>

13. The tariff provides that the program funds can be used on any of the equipment types and does not limit the amount of incentives that can be spent on any one type of equipment. No analysis was provided showing what the RIM result would be if a different number of each of these equipment types is installed.<sup>136</sup> Since the amount of power consumed varies greatly with each type of equipment and the entire program

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<sup>129</sup> Ex. 102, Byron Murray Rebuttal, p. 5.

<sup>130</sup> *Ameren Missouri's Initial Post-Hearing Brief* (filed January 7, 2019), pp. 42 and 43; and *Ameren Missouri's Reply Brief*, (filed January 17, 2019), p. 66 and attached exemplar tariff sheets.

<sup>131</sup> Ex. 4, Pickles Direct, p. 18.

<sup>132</sup> Ex. 4, Pickles Direct, p. 8 and Schedule DP-D2-31; Ex. 6, Wills Direct, p. 37; and Tr. p. 147.

<sup>133</sup> Ex. 102, Byron Murray Rebuttal, p. 5.

<sup>134</sup> Ex. 4, Pickles Direct, Schedule DP-D2-35.

<sup>135</sup> Ex. 4, Pickles Direct, Schedule DP-D2-50.

<sup>136</sup> Ex. 102, Byron Murray Rebuttal, p. 5.

budget could be spent on one type of equipment, it is unreasonable to rely on the limited cost benefit analysis to determine if the benefits of electrification will be realized.

14. Of the budgeted \$6.88 million for the program, 44% is dedicated to program administration. This leaves only \$3.8 million for the actual incentives that are purported to provide the benefits to all customers.<sup>137</sup>

### **Conclusions of Law**

A. Section 393.130, RSMo., prohibits an electrical corporation from granting “any undue or unreasonable preference or advantage” or causing “any undue or unreasonable prejudice or disadvantage . . . .”

B. Pursuant to Section 393.140, RSMo., and 4 CSR 240-14.0303(3), Ameren Missouri must include in its tariffs incentive programs such as the proposed Charge Ahead programs.

C. The Commission has promulgated regulations at Chapter 14 to govern promotional practices by utilities. That regulation requires that all promotional practices, such as the Charge Ahead programs “be just and reasonable, reasonable as a business practice, economically feasible and compensatory and reasonably calculated to benefit both the utility and its customers.”<sup>138</sup> Additionally, that regulation requires that the programs be offered or granted “uniformly and contemporaneously . . . to all persons in a reasonable defined class”<sup>139</sup> and must not “offer or grant any undue or unreasonable preference or advantage to any person or subject any person to any undue or unreasonable prejudice or disadvantage. . . .”<sup>140</sup>

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<sup>137</sup> Ex. 102, Byron Murray Rebuttal, p. 5.

<sup>138</sup> 4 CSR 240-14.0303(1).

<sup>139</sup> 4 CSR 240-14.0303(2).

<sup>140</sup> 4 CSR 240-14.0303(2).



## **Decision**

Ameren Missouri has proposed a program to give incentives to private companies for the purpose of incentivizing those companies to purchase electric equipment instead of equipment with internal combustion engines. The Commission determines that Ameren Missouri's Charge Ahead-Business Solutions Program is not just and reasonable or in the public interest.

The program has seven different types of equipment which can qualify for incentives. Five of those electric equipment types do not have a significant market share. However, at least with regard to electric forklifts and GPUs, the market seems to be fully aware of the benefits of electrification. This is evidenced by electric forklifts already consisting of 54% of the market and electric GPUs consisting of 47%. It is not reasonable to assume in a market that saturated that there will not be a significant problem with free riders. Ameren Missouri has not shown the forklifts or GPU incentives would be an appropriate promotional practice for the Company.

Ameren Missouri has not shown that it has sufficient procedures in place to determine that the incentives will not go to free riders. Ameren attempted to make changes to its tariff language to add some of these checks and balances with language presented in its initial and reply briefs. However, these proposals did not have the benefits of being fully vetted during the hearing process and were submitted after the close of the evidence. Therefore, the Commission will not adopt those proposals and makes no ruling on their reasonableness here.

There are other issues with the Business Solutions program that make it unreasonable and not in the public interest. Ameren Missouri produced evidence of a

positive cost benefit analysis. However, because the analysis hinged on assumptions regarding the number of pieces of electric equipment installed under various incentive types and the evidence shows that the incentive costs and kWh saved vary greatly depending on which measure is utilized, the Commission finds it is not reasonable to rely on this analysis. Thus, whether the program would truly produce the benefits alleged cannot be determined.

Finally, the budgeted \$6.88 million includes 44% dedicated to program administration, leaving only \$3.8 million for the actual incentives that are purported to provide the benefits to all customers. The Commission determines that this high percentage of the budget allocated for administrative costs is unreasonable in this instance.

After considering Ameren Missouri's Business Solutions Program, the Commission determines that while there may be beneficial electrification programs that are worthwhile, as demonstrated by other states adopting such measures, Ameren Missouri has not presented the Commission with such a program in this case. Instead, Ameren Missouri presented a program that includes two equipment categories that do not need incentives, did not provide sufficient information in the cost-benefit analysis to demonstrate that the program would realize the benefits for which it was created or that proper controls would prevent free riders, and presented a program with very high administrative costs. Therefore, the Commission determines that Ameren Missouri has not shown that its Business Solutions Program is reasonable or in the public interest. The Commission will not approve this program.

### **3. Should the Commission grant the variances requested by Ameren Missouri?**

#### **Findings of Fact**

1. Along with its application for approval of the Charge Ahead programs, Ameren Missouri asked for a variance from all of Chapter 14<sup>141</sup> of the Commission's regulations regarding promotional practices.<sup>142</sup> Ameren Missouri later qualified its request to a variance from subsections 4 CSR 240-14.020(1)(B) and (1)(D), though it continued to note that there may be other Chapter 14 provisions that "a creative practitioner" could argue would be violated by these programs.<sup>143</sup>

2. The Commission has found above that the Corridor Charging Sub-Program meets the standards of an appropriate promotional practice as set out in Chapter 14.

3. The Charging Corridor Sub-Program approved above will include incentives for the installation and use of equipment including line extensions, demand mitigation solutions, costs for "Make Ready" activities, and the costs of charging equipment.<sup>144</sup>

4. No other utility is providing the same or competing utility service in all or any portion of Ameren Missouri's service area with regard to the EV charging stations to be implemented in the corridor subprogram.

#### **Conclusions of Law**

A. Subsection 4 CSR 240-14.020(1)(B) prohibits any public utility from "furnishing . . . consideration to any architect, builder, engineer, subdivider, developer or other person for work done or to be done on property not owned or otherwise possessed

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<sup>141</sup> 4 CSR 240-14, Prohibited Promotional Practices.

<sup>142</sup> *Application, Request for Variance, and Request for Accounting Authority*, (filed February 22, 2018), paras. 8-10.

<sup>143</sup> File No. ET-2018-0132, *Ameren Missouri's Response to OPC's Motion to Dismiss*, (filed April 20, 2018), p. 6.

<sup>144</sup> Tariff Tracking No. YE-2018-0105, Sheet No. 165.2.

by the utility or its affiliate, except for studies to determine comparative capital costs and expenses to show the desirability or feasibility of selecting one (1) form of energy over another[.]”

B. Subsection 4 CSR 240-14.020(1)(D) prohibits any public utility from “furnishing . . . consideration to any dealer, architect, builder, engineer, subdivider, developer or other person for the sale, installation or use of appliances or equipment[.]”

C. Subsection 4 CSR 240-14.020 (1)(E) prohibits any public utility from providing “free, or less than cost or value, wiring, piping, appliances or equipment to any other person[.]”

D. Commission Rule 4 CSR 240-14.010(2) provides that the Commission may grant a variance from the provisions of Chapter 14 “for good cause shown.” That section also requires that “[t]he utility filing the application shall show proof of service of a copy of the application on each public utility providing the same or competing utility service in all or any portion of the service area[.]”

### **Decision**

Ameren Missouri has requested a variance from 4 CSR 240-14.020(1)(B) and (1)(D) of the Commission’s promotional practices rules. Under the Charging Corridor Sub-Program, Ameren Missouri would offer incentives for the installation and use of equipment. Therefore, without a variance from the rule, Ameren Missouri would be in violation of 4 CSR 240-14.020(1)(B) and (1)(D). Additionally, the Commission notes that under a strict reading of the rule, these incentives may provide “free, or less than cost or value, wiring, piping, appliances or equipment” in violation of 4 CSR 240-14.020(1)(E).

Thus, the Commission finds that Ameren Missouri is also requesting a variance from subsection (1)(E) of 4 CSR 240-14.020.

The variance rule also requires that Ameren Missouri show proof of service upon public utilities providing the “same or competing utility service in all or any portion of the service area.”<sup>145</sup> There was no evidence presented that there was any other utility in Ameren Missouri’s service area that would be providing the same or a competing service. Thus, the Commission finds that no service could have been made upon any other public utility.

The Commission has determined herein that Ameren Missouri has demonstrated the Charging Corridor Sub-Program should be implemented. Those findings and conclusions that Ameren Missouri has shown a need for, and the benefits to the public from, implementing this limited Charging Corridor Sub-Program, also support finding good cause to grant a limited variance of the Commission’s rule. Therefore, the Commission will grant a variance of subsections 4 CSR 240-14.020(1)(B), (1)(D), and (1)(E) only as those subsections are applied to the Charging Corridor Sub-Program as described in any approved compliance tariff resulting from this case.

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<sup>145</sup> 4 CSR 240-14.010(2).

**THE COMMISSION ORDERS THAT:**

1. The tariff submitted under Tariff Tracking No. YE-2018-0104 on February 22, 2018, is rejected.

2. The tariff submitted under Tariff Tracking No. YE-2018-0105 on February 22, 2018, is rejected.

3. Union Electric Company d/b/a Ameren Missouri may file a tariff in compliance with this Report and Order to implement an electric vehicle charging corridor program similar to the Charge Ahead – EV Charging Corridor Subprogram set out in Tariff Tracking No. YE-2018-0105.

4. Union Electric Company d/b/a Ameren Missouri is granted a variance of subsections 4 CSR 240-14.020(1)(B), (1)(D), and (1)(E) only as those subsections are applied to the Charging Corridor Sub-Program as described in any approved compliance tariff resulting from this case.

5. Ameren Missouri is authorized to use a deferral accounting mechanism to track the EV Charging Corridor Sub-Program costs and its administrative expenses for possible recovery of those prudently incurred expenses in future rate cases.

6. As set out in the body of this Report and Order, Ameren Missouri shall provide an annual report on the incentive program by filing it in the current case file no later than 30 days after the anniversary date of the tariff effective date of any tariff implementing the EV charging corridor program authorized herein. A report shall be filed every year for the life of the program plus one year after its completion.

7. By separate order, a working file shall be opened wherein Staff, Ameren, and all other interested parties may evaluate potential mechanisms for facilitating installation of EV charging stations as set out above.

8. This report and order shall become effective on February 16, 2019.



**BY THE COMMISSION**

A handwritten signature in black ink that reads "Morris L. Woodruff".

Morris Woodruff  
Secretary

Silvey, Chm., Kenney, Hall, and Coleman, CC., concur.  
Rupp, C., dissents.

Dippell, Senior Regulatory Law Judge

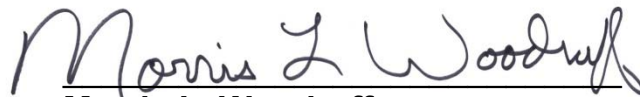
**STATE OF MISSOURI**

**OFFICE OF THE PUBLIC SERVICE COMMISSION**

I have compared the preceding copy with the original on file in this office and I do hereby certify the same to be a true copy therefrom and the whole thereof.

**WITNESS** my hand and seal of the Public Service Commission,  
at Jefferson City, Missouri, this 6<sup>th</sup> day of February 2019.



  
**Morris L. Woodruff**  
**Secretary**



**MISSOURI PUBLIC SERVICE COMMISSION**

**February 6, 2019**

**File/Case No. ET-2018-0132**

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***Enclosed find a certified copy of an Order or Notice issued in the above-referenced matter(s).***

***Sincerely,***



**Morris L. Woodruff  
Secretary**

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Recipients listed above with a valid e-mail address will receive electronic service. Recipients without a valid e-mail address will receive paper service.