

Program, filed October 12, 2018. Although the Second Stipulation is still pending a Commission decision, its existence limits the issues in dispute among the parties to the following:

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?

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?

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?

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

Staff argues that the Commission should reject the Business Solutions program in its entirety, reject the requested accounting authority, and reject the variance from the Promotional Practice rules. As for Charge Ahead-EV, Staff does not recommend approval of the programs, instead Staff recommends 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.² Under such a tariff Ameren Missouri would not require line extension charges from a customer seeking a line extension for separately metered electric vehicle charging that meets public policy considerations to be developed with stakeholder input and included in the tariff.³ The subsidies under this approach would be limited to the line extension costs otherwise payable by the entity seeking to install the charger.⁴

In the alternative, if the Commission approves Ameren Missouri's application as is, Staff would recommend adopting the Office of the Public Counsel's (OPC) performance based metric, with a cap to not exceed 100% recovery.

The Commission has the legal authority to condition applications.

The Commission has been vested, as part of its enacting statutes, with all power and authority to carry out and fully effectuate its purpose.⁵ The authority extends

1) To the manufacture, sale or distribution of gas, natural and artificial, and electricity for light, heat and power, within the state, and to persons or corporations owning, leasing, operating or controlling the same; and to gas and electric plants, and to persons or corporations owning, leasing, operating or controlling the same;

(7) 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.⁶

One of these powers is the ability to condition approval upon the utility accepting certain modifications to its application. 393.140, RSMo., outlines the general powers of

² Tr. Vol. 4, p. 442, l. 17-19.

³ Ex. 100, *Staff Report on the Estimated Costs and Benefits of a Make Ready Tariff for Separately Metered EV Charging*, p. 1.

⁴ Ex. 101, *Lange Rebuttal*, p. 3, l. 7- 9.

⁵ 386.040, RSMo.

⁶ 386.250, RSMo.

the Commission, and within these paragraphs are examples of conditions that the Commission can, and has, ordered as part of its decision on a case.

393.140 (2), RSMo., allows the Commission to

Investigate and ascertain, from time to time, the quality of gas or water supplied and sewer service furnished by persons and corporations, examine or investigate the methods employed by such persons and corporations in manufacturing, distributing and supplying gas or electricity for light, heat or power and in transmitting the same, and in supplying and distributing water for any purpose whatsoever, and in furnishing a sewer system, and have 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.

The Commission is given express authority to order improvements to best promote the public interest, health, or safety. This can range from conditioning a certificate of convenience and necessity on certain safety permits being obtained to requiring customer consent before utilizing affiliate vendors.

393.140 (5) allows the Commission to

Examine all persons and corporations under its supervision and keep informed as to the methods, practices, regulations and property employed by them in the transaction of their business. **Whenever the commission shall be of the opinion, after a hearing had upon its own motion or upon complaint, that the rates or charges or the acts or regulations of any such persons or corporations are unjust, unreasonable, unjustly discriminatory or unduly preferential or in any wise in violation of any provision of law, the commission shall determine and prescribe the just and reasonable rates and charges thereafter to be in force for the service to be furnished, notwithstanding that a higher rate or charge has heretofore been authorized by statute, and the just and reasonable acts and regulations to be done and observed;** and whenever the commission shall be of the opinion, after a hearing had upon its own motion or upon complaints, that the property, equipment or appliances of any such person or corporation are unsafe, insufficient or inadequate, the

commission shall determine and prescribe the safe, efficient and adequate property, equipment and appliances thereafter to be used, maintained and operated for the security and accommodation of the public and in compliance with the provisions of law and of their franchises and charters.

The Commission expressly has the authority to condition any act or regulation being undertaken by a regulated utility to be performed in a way the Commission deems just and reasonable. In this case, should the Commission authorize Ameren Missouri to pursue an electric vehicle (EV) tariff or a make ready model, the Commission may find that Ameren Missouri shall utilize the OPC performance incentive metric, or undergo a stakeholder collaborative, in order to be a just and reasonable act. At that time, Ameren Missouri has the discretion to move forward with the program, as conditioned by the Commission, or to not move forward with the program at all.

The courts have found that the Commission acts with quasi police authority.

The public service commission is essentially an agency of the Legislature and its powers are referable to the police power of the state. It is a fact-finding body, exclusively entrusted and charged by the Legislature to deal with and determine the specialized problems arising out of the operation of public utilities. It has a staff of technical and professional experts to aid it in the accomplishment of its statutory powers. Its supervision of the public utilities of this state is a continuing one and its orders and directives with regard to any phase of the operation of any utility are always subject to change to meet changing conditions, as the commission in its discretion, may deem to be in the public interest. Courts of review perform no such function. They do not examine the record under review for the purpose of determining what order they would have made. As long as the commission acts in accord with due process of law and its findings and decisions do not run afoul of constitutional and statutory requirements and the inherent powers of the courts, it is engaged in an exercise of the police power of the state, with which it is not the province of the courts to interfere.⁷

The Court is acknowledging that the Commission has to, as part of its duties, have authority to issue orders and directives (a condition is a form of directive) to ensure

⁷ *State ex rel. Gulf Transport Co. v. Public Service Com'n of State*, 658 S.W.2d 448, 472 (Mo. App., W.D. 1983), quoting *State ex rel. Chicago, R.I. & P.R. Co. v. Public Service Commission*, 312 S.W.2d 791, 796 (Mo. banc 1958).

public utilities are acting in the public interest. The Court has also acknowledged that the Commission has an inherent ability to condition what expenses a utility collects, and how it collects those expenses.⁸ This grant of power expressly allows the Commission to implement OPC's performance incentive metric. The United States Supreme Court has emphasized that the Commission is obligated to protect the public interest at each step of its process, which would implicitly allow the Commission the tools, including conditioning applications, to do so.

The Commission cannot confine its inquiries either to the computation of costs of service or to conjectures about the prospective responses of the capital market; it is instead obliged at each step of its regulatory process to assess the requirements of the broad public interests entrusted to its protection by Congress. Accordingly, the 'end result' of the Commission's orders must be measured as much by the success with which they protect those interests as by the effectiveness with which they 'maintain * * * credit and * * * attract capital.'⁹

The Commission should reject the Business Solutions program, as the evidence shows the project is neither necessary nor cost effective.

The Commission should reject Ameren Missouri's Charge Ahead-Business Solutions Program, as additional ratepayer funded incentives are not necessary nor

⁸It would appear that the statutory power and authority which the commission has to pass upon the reasonableness and lawfulness of rates and to determine and pass upon the question of what rates are necessary to permit a utility to earn a fair and reasonable return (§§ 392.220, 392.230, 392.240) necessarily includes the power and authority to determine what items are properly includable in a utility's operating expenses and to determine and decide what treatment should be accorded such expense items. *Cf. State ex rel. Western Union Tel. Co. v. Public Service Commission*, 304 Mo. 505, 517, 264 S.W. 669, 672, 35 A.L.R. 328.

⁹ *In re Permian Basin Area Rate Cases*, 390 U.S. 747, 791, 88 S.Ct. 1344, 1372-73, 20 L. Ed. 2d 312 (1968).

cost effective, as evidenced by adoption rates of over 50% for certain proposed incentivized product end uses, which leads to very serious issues regarding free ridership. Furthermore, the Volkswagen (VW) mitigation trust is also incentivizing similar electrification programs, rendering portions of the Business Solutions program redundant. Finally, not only is the Business Solutions program riddled with potential free ridership, the cost effectiveness of the program is questionable. The positive cost benefit analysis results hinge on assumptions regarding the number of pieces of electric equipment installed under various incentive types (the number of electric forklifts, ground support equipment, etc.).¹⁰ However, the tariff is not designed to produce those same results, as the tariff does not cap the amount of budget spent on any one product type.¹¹

Staff and OPC have noted in testimony, both filed and at hearing, the looming free ridership issue that plagues this program.¹² The evidence on the record shows there is no need for this program, as electric forklifts comprise 54% of the market and truck refrigeration unit (TRU) dealers reported sales of up to 20% of electric stand-by TRUs.¹³ Furthermore, the tariff allows customers to receive incentives for adding new or additional electric forklifts to an existing fleet.¹⁴ However, the tariff does not prohibit customers with an existing fleet of electric forklifts from receiving an incentive to add an

¹⁰ Ex. 102, Byron Murray Rebuttal, page 5.

¹¹ *Id.*

¹² See Ex. 102, Byron Murray Rebuttal, and Ex. 200, Marke Rebuttal.

¹³ Ex. 102, Murray Rebuttal, pages 3-6.

¹⁴ See EFIS Item 3, *Proposed Charge Ahead Business Solutions Tariff*.

additional electric forklift.¹⁵ In fact, Ameren Missouri witness Mr. Pickles touts this fact in testimony as a superior feature over the VW Trust settlement program, stating

the VW Trust funds only address retirement of existing pieces of equipment, and require that the equipment being replaced be scrapped. New or expanding fleets or equipment are not eligible (thereby precluding approximately half of the forklift market from participating in the VW Trust settlement.)¹⁶

Staff finds that VW Trust to be superior in eliminating free ridership. If free ridership is a “person would have purchased the electric forklift in the absence of the program, yet they did participate in the program”,¹⁷ it is not an outlandish assumption to assume those adding electric forklifts to existing electric forklift fleets to more likely be free riders than those who are replacing retired non-electric forklifts. In fact, Ameren Missouri’s witness Mr. Pickles acknowledged this fact at hearing, stating, “if they’ve got electrics already and they’re just adding more electrics, they’re already believers.”¹⁸ Ameren Missouri claims that free ridership is prevented via the terms of the tariff and the program designed, and that whole quadrant of people is precluded from participating in the program.¹⁹ Putting aside disagreements about how effective their solutions may be, the reality is that those solutions and preclusions are not contained in the tariff or the ICF contract. For instance, Mr. Pickles claimed that program requires that buyers who are replacing existing forklifts permit site inspections before and after the new forklifts are purchased to ensure the existing fleet is not electric.²⁰ Both only require 25% of projects for each measure be inspected; furthermore, neither targets

¹⁵ *Id.*

¹⁶ Ex. 5, Pickles Surrebuttal, p. 22, l. 2-6.

¹⁷ Tr. Vol. 2, p. 160, l. 23-25.

¹⁸ Tr. Vol. 2, p. 188, l. 6-8.

¹⁹ Tr. Vol. 2, p. 188, l. 10-12.

²⁰ Ex. 5, Pickles Surrebuttal, p. 16, l. 3-6.

customers replacing forklifts as priorities for inspection.²¹ This means that there is nothing binding or enforceable in the tariff regarding free ridership prevention of existing electric forklift fleets adding new forklifts and collecting incentive payments from ratepayers.

Another concern of Staff and OPC is the high percentage of the budget that has been allocated to ICF, the employer of Ameren Missouri's consultant Mr. Pickles, for administrative costs. 44% of the budget is dedicated to program administration, which leaves only 3.8 million dollars for the actual incentives that are purported to provide the benefits to all customers.²² Mr. Pickles tries to justify this fee in his surrebuttal testimony, stating that barriers of price, unfamiliarity, skepticism and fear were not only justifications behind the need for incentives to expand the forklift market, those barriers justified high administrative costs.²³ OPC witness Dr. Marke testified that not only are these supposed barriers inappropriate justification for incentivizing an electric forklift market share that is trending higher and a program that allows those who already own electric forklifts, thus would not have to overcome those barriers, it is inappropriate justification for the very high administrative costs.²⁴ Dr. Marke, a regular participant on behalf of OPC in rate cases and cases involving the Missouri Energy Efficiency Investment Act and evaluation, measurement, and verification of those programs, testified he had never seen programs so lopsided, where "we're essentially giving more money to the implementers to go ahead and produce the program. So again, I feel like

²¹ See EFIS Item 3, *Proposed Charge Ahead Business Solutions Tariff* and Ex. 203C, Contract Between ICF and Ameren.

²² Ex. 102, Byron Murray Rebuttal, page 5.

²³ Ex. 5, Pickles Surrebuttal, p. 13, l. 9-21 and p. 25, l. 4-7.

²⁴ Tr. Vol. 4, p. 337, l. 12 through p. 338, l. 5.

the program is flawed.”²⁵ Ameren Missouri tries to justify the administrative costs by claiming that Dr. Marke incorrectly asserts that there is only participant in the airport program, when in fact there are the 12 airlines at Lambert International Airport²⁶ and other regional airports that may be eligible to apply. This is a brazen attempt at post ad hoc justification, when ICF’s own analysis excluded those regional airports.²⁷

Free ridership is not the only problematic piece of the Business Solutions analysis. Mr. Pickles states in surrebuttal that the program would only fail to be cost effective if the free ridership exceeded 54%.²⁸ Concerning to Staff is the fact that although figures have been provided regarding various levels of free ridership, the entire RIM analysis hinges on a specific assumption about what measures are installed and when. The analysis is a blended net to gross ratio for the entire portfolio.²⁹ For instance, his recommended program assumes 991 conventional forklifts, 498 truck stop electrification (TSE) measures, 11 belt loaders and 11 ground power units (GPU) will be incentivized over 5 years.³⁰ Nothing has been provided to show what happens to the cost effectiveness if a different level of assumed measures is installed, or if certain measures fail to be installed at any point during the program. This sort of analysis is necessary when one measure relied upon has savings of 250,000 kWhs (GPU), but another measure saves a mere 5,000 kWh (belt loaders).³¹ Or a conventional forklift

²⁵ Tr. Vol. 4, p. 338, l. 9-13.

²⁶ Currently, there is ambiguity and confusion regarding if customer means account holder, as it does in other provisions of Ameren Missouri’s tariff, and if Lambert International Airport would be the sole account holder, rendering the individual airlines ineligible to apply.

²⁷ Tr. Vol. 2, p. 177, l. 1-4.

²⁸ Ex. 5, Surrebuttal Testimony of David K. Pickles, p. 17, l. 1-2.

²⁹ Tr. Vol. 2, p. 192, l. 14-16.

³⁰ Ex. 4, Pickles Direct, Schedule DP-D2-35.

³¹ *Id.* at DP-D2-50.

saves 30,000 kWhs versus a TSE at 6,500 kWh results in a 23,500 kWh saving assumption difference.³² As the tariff contains no caps on any measure,³³ nor is designed to achieve any certain level of measures being installed, the cost benefit analysis provided is unreliable.

Because this program is not a good utilization of ratepayers funds due to the high probability of free ridership and the uncertain assumptions behind the cost benefit analysis, and due to the direct competition this tariff would have with the CNG provisions found in Spire Missouri East's and Spire Missouri West's tariff sheets, Staff does not believe Ameren has shown good cause to support a waiver of the entirety of the Commission's Promotional Practices rule. The Business Solutions program should be rejected in its entirety.

The Commission should reject the Charge Ahead-EV programs, as the evidence shows that these four programs are neither necessary nor cost effective.

All Charge Ahead EV programs have flawed analyses underpinning their cost-effectiveness and should be rejected.

Ameren Missouri has not provided sufficient evidence that there is a need for any of the programs, or that ratepayer subsidization is essential to spur EV adoption rates.³⁴ In general, Ameren Missouri has made no clear connection between this program and

³² *Id.* at DP-D2-48, 51.

³³ Tr. Vol. 2, p. 176, l. 1.

³⁴ Ex. 101, Lange Rebuttal, page 5 and Ex. 106, Murray Rebuttal, pages 7-8.

its estimate of an additional 7,500 electric vehicles in the Ameren Missouri service territory for parties to begin to determine what level of adoption is naturally occurring and what would be attributable to the \$11 million ratepayer subsidy.³⁵ Ameren Missouri readily admits that it has not done projections for future EV sales going forward if this project is approved.³⁶ That means Ameren Missouri has not provided reliable evidence that either (A) the program will produce net benefits to nonparticipating ratepayers, or that (B) the public policy benefits Ameren Missouri claims the program will produce an offset the net program rate impact.³⁷ Not only are necessary and concrete details missing from the proposal, there is not the slightest evidence the programs as proposed will “cause” EV adoption, as opposed to subsidization of those who would move to EVs anyway.³⁸ Again, Ameren Missouri quickly admits that it does not have strong forecasts moving forward about the future of EVs with and without the Charge Ahead EV programs.³⁹ Inexplicably, Ameren Missouri asserts that it does not know how many EVs this program will cause, and how many EVs would be purchased without the program, yet are adamant that without the program, EV sales will continue to lag and there will not be the adoption rate (that Ameren Missouri is unable to provide) realized.⁴⁰ At various points throughout testimony, Ameren Missouri alternates between using the \$11 million dollar program as the reason for 7,500 new EVs projected in Ameren Missouri’s service territory, (In his surrebuttal, Mr. Wills modifies this figure to 8,890 EVs, on the

³⁵ Ex. 101, Lange Rebuttal, page 5.

³⁶ Tr. Vol. 2, p. 133, l. 13-16.

³⁷ Ex. 101, Lange Rebuttal, page 2.

³⁸ Ex. 101, Lange Rebuttal, page 5.

³⁹ Tr. Vol. 2, p. 133, l. 21-22.

⁴⁰ Tr. Vol. 2, p. 134, l. 1-4.

low end of his revised calculation⁴¹) and using the 7,500 new projected EVs as the reason for an \$11 million dollar budget.⁴² This leaves Staff unable to ascertain from Ameren Missouri's testimony whether the projection drove the budget, or the budget drove the projection.

Regardless of the flaws used to justify the \$11 million dollar budget, the most glaring shortcoming of the Ameren Missouri analysis is the failure to connect the tariffed programs to the budget in any way.⁴³ Ameren Missouri is requesting \$11 million of ratepayer dollars with absolute and unfettered discretion as to how many chargers will be installed, how much of the budget will be expended on administrative costs, what kind of chargers will be installed, and whether those chargers will be dedicated solely to one condo or apartment tenant in an assigned parking space or installed for the benefit of Missourians at public parks or commercial centers in a manner to more broadly facilitate EV adoption.⁴⁴ Humorously, Ameren Missouri warns against trusting what funds will be available for the VW Mitigation Trust due to its ability to move funds from program to program, without acknowledging Ameren Missouri's similar program structure.⁴⁵ The failure to connect the tariffed programs to the budget leads Staff unable to conduct an appropriate cost benefit analysis or determine if free ridership is minimized while public policy benefits are maximized, leaving Staff with no choice but to

⁴¹ *Id.* at p. 38 – 39.

⁴² Ex. 6, Wills Direct testimony, pages 30-33.

⁴³ Ex. 101, Lange Rebuttal, page 5.

⁴⁴ Ex. 101, Lange Rebuttal, page 12.

⁴⁵ Q. "So tell me what guarantees there are that the 6 million dollars is going to end up being allocated to EV chargers?" A. "There is no guarantee." Tr. Vol. 2, p. 142, l. 5-8. "As long as it's within what the VW trust says is okay." Tr. Vol. 2, p. 142, "And so that money could be moved—in fact, they've already moved some money. So there are changes that can be made to it." Tr. Vol. 2, p. 141, l. 11-12, 16-17.

recommend rejection of the programs as tariffed, and push towards a stakeholder collaborative to design a tariff.⁴⁶

What little detail Ameren Missouri does provide is used to assert that the additional kWh sold will bring in more revenue than the cost of the energy, infrastructure, subsidies, and program costs increase revenue requirement; however these analyses are internally inconsistent and not supported by competent and substantial evidence.⁴⁷

A glaring issue involves Ameren Missouri's capacity cost assumptions, and the assumption regarding EV charging's contribution to peak. Ameren Missouri criticizes Staff witness Sarah Lange's assumptions regarding load and demand as unreasonable,⁴⁸ but seems to not have read deeply into the studies underpinning its own assumptions. (It is also important to note that Staff does not have the burden of persuasion in this case, nor is Staff asking the Commission to bet on the accuracy of its predictions with ratepayer funds.) Ameren Missouri witness Steve Wills's direct testimony provided margin calculations that did not rely upon a load shape.⁴⁹ Ameren Missouri did not rely upon its own load shape when calculating margin assumptions. However, Ameren Missouri relied upon the 20 percent finding from an IPL study as a reasonable assumption regarding coincident peak (CP) hour and the energy consumption in peak periods as a proxy for the impact of charging within the CP hour.⁵⁰ This assumption has an impact on capacity costs, making it important to the

⁴⁶ Tr. Vol. 4, p. 442, l. 17-19.

⁴⁷ Ex. 101, Lange Rebuttal, pages 8-10.

⁴⁸ Tr. Vol. 2, p. 217, l. 2-6.

⁴⁹ See Ex. 109, Data Request #1.

⁵⁰ Tr. Vol. 2, p. 224, l. 4-25.

cost benefit analysis performed.⁵¹ But Ameren Missouri admits it is unaware if all participants on the IPL study were on a Time of Use rate (ToU), but does admit a ToU rate would incentivize participants to charge off peak, which influences the load shape of the IPL study Ameren Missouri relied upon as a proxy.⁵² However, a review of the IPL study that Ameren Missouri relied upon shows that study was based on Rate EVX participants, who were separately metered EV customers on a ToU rate.⁵³ The Southern California utility also utilized as a proxy for Ameren Missouri's CP EV charging impact also has a ToU offering.⁵⁴ Without the ToU incentive to charge off peak, it is unknown if those two load shapes are appropriate proxies for Ameren Missouri, which calls into question the reasonableness of Ameren Missouri's capacity costs. Finally, as Chargepoint witness Mr. Ellis touched on, the location and charging speed of the charging station have an impact on the capacity and infrastructure costs.⁵⁵ Also concerning is that sub-program RIM results are not provided, nor is there discussion or quantification of the number of EVs expected to be enabled by each sub-program in the filed testimony.⁵⁶

Finally, the subsidies proposed by Ameren Missouri exceed those cost categories that Staff understands to be subject to a typical "Make Ready" level of

⁵¹ Tr. Vol. 2, p. 224, l. 22-25.

⁵² Tr. Vol. 2, p. 276, l. 2-15.

⁵³ See Ex. 115, IPL Electric Vehicle Program Report Year 3, 2013 Report, in which Rate EVX, the ToU rate, had 95 participants that used approximately 209 kWh in December 2013. The December 2013 total listed that make up the input for the load shape data is 19, 872. 19, 872 kWh divided by 95 participants is approximately 209 kWh, meaning that every EV participant studied was on the ToU rate.

⁵⁴ Tr. Vol. 2, p. 227, l. 21-25.

⁵⁵ Tr. Vol. 2, p. 310-312.

⁵⁶ Tr. Vol. 2, p. 121, l. 14-23.

subsidization.⁵⁷ In other words, Ameren Missouri is proposing to include costs such as awnings, battery storage, and other non-essential items beyond what is typically included in a line extension as part of the “Make Ready” model, without evidence of the necessity or resulting benefits to all customers.

The Charge Ahead-EV Corridor Program is an inappropriate and redudant use of ratepayer funds.

Due to the Electrify America and the Volkswagen Mitigation Trust programs plans to install EV charging stations to create a minimum practical network, Ameren Missouri has not shown that there is additional need for their ratepayer funded program.⁵⁸ Electrify America will be building charging stations along Missouri’s major highways, which will enable intrastate travel without ratepayers funds.⁵⁹ The VW mitigation trust has also set aside 6 million dollars for a corridor program, without the use of ratepayers’ funds.⁶⁰ Utilizing ratepayers’ funds to create a corridor is a redundant and inefficient use of ratepayer funds. Although not present in the direct application, Ameren Missouri makes the claim that the corridor program is due to Ameren Missouri’s commitments as part of voluntary EV collaborative referenced in Staff witness Byron Murray’s testimony.⁶¹ However, this would mean that Ameren Missouri committed their ratepayers to paying for the lion’s share of the statewide EV network, despite the approximately 10 members, including the Empire District Electric Company, Kansas City Power and Light, KCPL Greater Missouri Operations, and three

⁵⁷ Ex. 105, Murray Rebuttal, pages 10 - 11.

⁵⁸ Ex.102, Byron Murray Rebuttal, pages 7-10.

⁵⁹ Ex. 102, Byron Murray Rebuttal, p. 9, l. 3-7.

⁶⁰ *Id* at p. 8, l. 5-6.

⁶¹ Ex. 3C, Justis Surrebuttal, p. 8, l. 16-18.

other municipal utilities.⁶² According to Mr. Justis, there is a six million dollar gap between the VW mitigation trust funding and what is necessary for a statewide program.⁶³ Out of the six million dollars required statewide between 10 collaborative partners, Ameren Missouri ratepayers will be footing the bill for 4.4 million dollars, which is 73% of the total amount required to build a *statewide* corridor.⁶⁴ This is an unreasonable result that unfairly burdens Ameren Missouri ratepayers as a result of Ameren Missouri's voluntary commitment to a statewide program. The corridor program should be rejected. However, if the Commission would approve the program, the approval should be conditioned on the charging stations being placed in accordance with the assigned charging stations, represented as the red dots in the map located on page 7 of Ameren Missouri witness Patrick Justis's surrebuttal, taking into consideration that the map does not reflect the stations being installed by Electrify America. This condition would align with Ameren's representations about the corridor program being part of Ameren Missouri's commitment as part of the EV collaborative and would allow more accurate cost benefit analyses to be performed, accounting for localized capacity, distribution, and infrastructure characteristics to allow for a more accurate cost estimate.

The Multifamily program is not cost effective as it will not enable enough EVs to cover its costs.

Turning to multifamily, Staff has repeatedly expressed its concerns regarding this program to Ameren. The largest concern regarding the multifamily concern is that

⁶² Tr. Vol. 2, p. 123, l. 15-22.

⁶³ Tr. Vol. 2, p. 123, l. 3-7.

⁶⁴ See EFIS Item 4, *Proposed EV Tariff Sheets*, Sheet 165.3.

subsidies would be available to private, assigned parking spaces. As discussed above, Staff has numerous concerns about the assumptions underpinning the cost effectiveness results. However, regardless of Staff's numerous concerns, taking Ameren's own provided figures at face value highlights the programs would not provide benefits to non-participants. Mr. Wills' revised construction allowance is around \$1,200.⁶⁵ For a budget of 4.4 million,⁶⁶ 3,666 EVs⁶⁷ would need to result from this program to be cost effective. Mr. Justis testified this program would enable about 800 ports.⁶⁸ A private, assigned parking space with charging port will only be usable by one tenant, and therefore, only spur adoption of one electric vehicle. That means this program is more likely to spur 800 new EVs, a far cry from the 3,666 to make the program cost effective. In fact, to provide benefits to non-participants, 4 to 5 electric vehicles, **per port**,⁶⁹ must be enabled. This program will not be able to cover its costs, which makes it on its face not cost effective, requiring the Commission to reject the program.

The Workplace Charging Program is not cost effective, as it will not enable enough EVs to cover its costs.

Staff, in its rebuttal, noted that the workplace charging program needed a reasonable utilization rate of at least two vehicles charging at each port per day, or the revenue from the charging station would be overstated.⁷⁰ Again, even under Ameren

⁶⁵ Ex. 7, Wills Surrebuttal pages 38-39.

⁶⁶ See EFIS Item 4, *Proposed EV Tariff Sheets*, Sheet 165.4.

⁶⁷ 4.4 million divided by 1,200.

⁶⁸ Ex. 2, Justis Direct, p. 36.

⁶⁹ 3,666 divided by 800.

⁷⁰ Ex. 101, Lange Rebuttal, p. 10, l. 6-9.

Missouri's assumptions of a construction allowance of \$1,200,⁷¹ a budget of 1.1 million needs to produce 916 EVs⁷² to be cost effective. Mr. Justis testified that this program would enable 136 ports.⁷³ Ameren Missouri witness Steve Wills stated that "if drivers are going to be required to move their cars around at lunch to share a charger, they probably will either not buy the car, or will simply fail to take the action that would otherwise ensure Ms. Lange's idea of 'reasonable utilization' of the workplace charging is met."⁷⁴ This means each workplace charging port would only enable one EV, for a total of 136 EVs, about 800 short to provide benefits to all customers. In fact, each work place port would have to enable 6 to 7 EVs, **per port**,⁷⁵ to provide benefits to all customers. Unfortunately, while Mr. Will's analysis is based on a Level 2 charging rate of 6.6 kW,⁷⁶ the tariff allows for Level 2 charging of up to 20 kW.⁷⁷ Factoring Mr. Will's capacity cost value of \$14 per port by 3 to account for his estimation of capacity costs for a 19.8 kW charger produces capacity costs of \$42 per port. Subtracting the \$28 dollar difference from Mr. Will's estimated \$259/vehicle margin produces a revised margin of \$231, which when multiplied by his annual carrying cost factor of 17.8%, produces a revised "construction allowance" of \$1,298, in contrast to his figure of \$1,459.⁷⁸ The same correction to his to his revised \$1,237 to \$1,319 surrebuttal figures⁷⁹ results in a construction allowance of \$1,006⁸⁰ to \$1,084.⁸¹ Using \$1,298

⁷¹ Ex. 7, Wills Surrebuttal pages 38-39.

⁷² 1.1 million divided by 1,200.

⁷³ Ex. 2, Justis Direct, p. 36.

⁷⁴ Ex. 7, Wills Surrebuttal p. 31, l. 20-23.

⁷⁵ 916 divided by 136.

⁷⁶ Ex. 6, Wills direct, page 26.

⁷⁷ Proposed tariff sheet 165.

⁷⁸ Ex. 6, Wills direct, pages 26-27.

⁷⁹ Ex. 7, Wills Surrebuttal pages 38 – 39.

⁸⁰ \$207 - \$28 = \$179. \$179 / 17.8% = \$1,005.62.

instead of \$1,459 in the context of the \$1.1 million budget for workplace charging results in a need for 847 workplace charging ports. Using \$1,084 and \$1,006 results in 1,015⁸² to 1,093⁸³ ports that would be required to make the EV program break even, assuming all assumptions work out exactly as provided by Mr. Wills and as allowed by Ameren Missouri's proposed tariff. Finally, recall, each of those 847 ports installed must cause an Ameren Missouri customer's employee who is also an Ameren Missouri residential customer (to account for weekend charging) to purchase an EV that has below-current average efficiency⁸⁴ and drive it a minimum of 80 miles per day.⁸⁵ As Staff testifies, the reasonableness of the \$207 - \$259 margin is highly questionable,⁸⁶ particularly if one assumes that only one vehicle will use each port,⁸⁷ and especially if charging above an approximate 6.6kW rate occurs.⁸⁸ There is no reliable evidence supporting the cost effectiveness of this program, and it should be rejected.

The Public Charging Program is ill-defined and has the potential to receive no funding at all, reducing any potential public benefit of range anxiety reduction.

Although this program is conceptually closest to what Staff is recommending as a positive outcome from the collaborative stakeholder group, in the context of the overall application, Staff recommends rejection. However, it is only 1.1 million of the

⁸¹ $\$221 - \$28 = \$193$. $\$193 / 17.8\% = \$1,084.27$.

⁸² $\$1,100,000 / \$1,084 = 1,014.76$.

⁸³ $\$1,100,000 / \$1,006 = 1,093.44$.

⁸⁴ Ex. 7, Wills surrebuttal, page 20.

⁸⁵ Ex. 7, Wills surrebuttal, page 19.

⁸⁶ Ex. 101, Lange rebuttal, pages 6 – 10.

⁸⁷ Ex. 101, Lange rebuttal, page 10; Ex. 100, *Staff Report on the Estimated Costs and Benefits of a Make Ready Tariff for Separately-Metered EV Charging*, page 4.

⁸⁸ Ex. 105C, Lange surrebuttal, page 4.

total 11 million dollar budget,⁸⁹ and also lacks a robust tariff that would encourage port sharing, or even identifies locations, number of ports, and the administrative cost associated, for Staff to truly evaluate the cost effectiveness of the program, and if it appropriately improves public accessibility of EV charging, minimizes free ridership, and maximizes potential benefits to other ratepayers through additional marginal revenues. Under Ameren’s tariff design, this program could ultimately be unfunded altogether, as the total \$11 million budget can be realigned in Ameren Missouri’s sole discretion.

Without more robust analysis and program design, Staff is unable to recommend approval of the Charge Ahead-EV programs. Instead, Staff recommends 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.⁹⁰ Under such a tariff, Ameren Missouri would not require line extension charges from a customer seeking a line extension for separately metered electric vehicle charging that meets public policy considerations that are developed with stakeholder input and included in the tariff.⁹¹ The subsidies under this approach would be limited to the line extension costs otherwise payable by the entity seeking to install the charger.⁹²

⁸⁹ See EFIS Item 4, *Proposed EV Tariff Sheets*, Sheet 165.4 – 165.5.

⁹⁰ Tr. Vol. 4, p. 442, l. 17-19.

⁹¹ ⁹¹ Ex. 100, *Staff Report on the Estimated Costs and Benefits of a Make Ready Tariff for Separately Metered EV Charging*, p. 1.

⁹² *Id.*

Ameren Missouri has not met the requirements to receive an accounting authority order nor a “tracker” deferral.

If approved, in Ameren Missouri’s next rate case, the appropriate amount of expense would be included in rates for Ameren Missouri to collect going forward, much like any other traditional expense item.⁹³ Ameren Missouri has not adequately supported its request for deferral accounting for program costs, in that it has not demonstrated how these expenses are extraordinary (e.g., unique, non-reoccurring, and unusual), which is the Commission’s threshold criterion for authorizing deferrals.⁹⁴ The expense is also immaterial, in every respect. It is not 5% of the utility’s net income, the traditional Commission yardstick.⁹⁵ Ameren Missouri’s retail revenue requirement is 2.7 billion, this cost is not material in comparison to that, it is only 1/10th of 1 percent.⁹⁶ Ameren Missouri readily admits this expense is “quite small in the scheme of things.”⁹⁷ Nor is this expense volatile, a new expense arising from a new Commission rule or new law, or a new cost for which there is no historical data and is difficult to forecast as part of a rate case allowance, the traditional criteria for a tracker. Ameren Missouri, despite having internal and external auditing resources, proffered its auditing testimony through a lay witness on the subject, who has no accounting training, no CPA, or any other specialized knowledge or skill to render him an expert.⁹⁸ As such, his testimony should be accorded little weight. The actual accountant on record, Staff witness Mr.

⁹³ Oligschlaeger Rebuttal, page 5.

⁹⁴ Oligschlaeger Rebuttal, page 4.

⁹⁵ “[A]n item should be more than approximately 5 percent of income...Commission approval must be obtained to treat an item of less than 5 percent, as extraordinary” State ex rel. Office of Pub. Counsel v. Pub. Serv. Comm’n of Missouri, 858 S.W.2d 806, 810 (Mo. Ct. App. 1993).

⁹⁶ Ex. 7, Wills Surrebuttal, p. 5, l. 23 to p. 6, l. 3.

⁹⁷ *Id.* at p.5, l. 18-19.

⁹⁸ Tr. Vol. 2, p. 240, l. 18-25.

Oligschlaeger, testified that Ameren Missouri should be denied both an accounting authority order and a tracker.⁹⁹ This is in line with the Uniform System of Accounts (USOA), which has been adopted as the correct account keeping method by the Commission, requirement that net income shall reflect all items of profit and loss during the current period.¹⁰⁰ The Commission should reject Ameren Missouri's request for deferral accounting. However, should the Commission authorize the deferral, no ratemaking determinations should be made in this case, as it is against Commission practice.¹⁰¹

Conclusion

Ameren Missouri has the burden of proof in this case, as the applicant. As Staff has clearly outlined, Ameren Missouri has not met that burden by producing reliable, convincing evidence that any of the Charge Ahead programs are necessary, or will induce the benefits necessary to cover the costs, making them cost-effective. Programs that are designed to be used by one small subset of customers should not be borne by every ratepayer without clear and convincing proof that all customers will benefit. In light of Ameren Missouri's failure to present compelling evidence, Staff argues that the Commission should reject the Business Solutions program in its entirety, reject the requested accounting authority, and reject the variance from the promotional practice rules. As for Charge Ahead-EV, Staff does not recommend approval of the programs, instead Staff recommends the Commission order Ameren

⁹⁹ Tr. Vol. 4, p. 490, l. 23 – p. 491, l. 2.

¹⁰⁰ Ex. 103, Oligschlaeger Rebuttal, p. 3, l. 19-23.

¹⁰¹ Missouri Gas Energy v. Pub. Serv. Comm'n, State of Mo., 978 S.W.2d 434, 436 (Mo. Ct. App. 1998).

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.¹⁰² Under such a tariff Ameren Missouri would not require line extension charges from a customer seeking a line extension for separately metered electric vehicle charging that meets public policy considerations to be developed with stakeholder input and included in the tariff.¹⁰³ The subsidies under this approach would be limited to the line extension costs otherwise payable by the entity seeking to install the charger.¹⁰⁴

WHEREFORE, on the basis of all the foregoing, Staff prays that the Commission will resolve all contested issues as recommended herein by Staff by rejecting the application, and grant such other and further relief as the Commission deems just in the circumstances.

/s/Nicole Mers

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¹⁰² Tr. Vol. 4, p. 442, l. 17-19.

¹⁰³ Ex. 100, *Staff Report on the Estimated Costs and Benefits of a Make Ready Tariff for Separately Metered EV Charging*, p. 1.

¹⁰⁴ Ex. 101, *Lange Rebuttal*, p. 3, l. 7- 9.

Certificate of Service

I hereby certify that a true and correct copy of the foregoing was served upon all of the parties of record or their counsel, pursuant to the Service List maintained by the Data Center of the Missouri Public Service Commission, on this 7th day of December 2019.

/s/ Nicole Mers