BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of Efficient Electrification Program	))))	Case No. ET-2018-0132

REPLY BRIEF OF THE OFFICE OF THE PUBLIC COUNSEL

COMES NOW the Office of the Public Counsel ("OPC") and for its *Reply Brief*, states as follows:

Introduction

For the most part, the OPC is content to stand on the arguments and evidence presented and cited to in its *Initial Brief*. However, there are several comments, arguments, and suggestions raised in the various initial briefs filed by the other parties to this case that the OPC considers worthwhile to address. Therefore, the OPC will utilize this *Reply Brief* to discuss those discreet concerns.

A. Charge Ahead Electric Vehicle Program

A cursory examination of the briefs filed by several of the parties to this case (mostly Union Electric Co. d/b/a Ameren Missouri ("Ameren")), would suggest that the OPC is opposing the EV program. The OPC would thus start off by reminding the Commission that it is requesting the Commission ***approve*** the EV program, though only on the condition that the EV program is modified to include the OPC's

performance based metric.[1] *Initial Brief of the Office of the Public Counsel*, pg. 1. In doing so, the OPC wishes to make clear that it stands by the points raised in its *Initial Brief* regarding the problems with Ameren's attempts to justify its program. For example, the OPC still maintains that it is illogical for Ameren to simultaneously argue that Missourians are not buying electric vehicles due to a lack of charging station infrastructure and that Ameren needs to promote the development of more charging station infrastructure because it expects a large number of Missourians will buy new electric vehicles in the near future.[2] *See id.*, pgs. 4 – 5. As the OPC explained in its initial brief, however, these issues can be, if not solved, at least avoided if the EV program is managed in such a way as to prevent ratepayers from bearing the risk of the program failing. *Id.*, pgs. 10 – 11. Thus, the OPC has worked diligently toward developing a means to allow Ameren to attempt its EV program while still ensuring that Ameren's captive customers are held harmless should the EV program go awry. The result of that work is the OPC's performance based metric.

The OPC will not reiterate how its performance based metric works given that topic was discussed at length in the OPC's *Initial Brief*. *See id.*, pgs. 15 – 22. Instead, the OPC will move on to discussing specific arguments raised in the briefs of the other

[1] The OPC would also point out that this position is consistent with the *Position Statement* filed by the OPC ***before*** the evidentiary hearing. *Position Statement of the Office of the Public Counsel*, pg. 1. Why Ameren's initial brief pretends that the OPC is opposing the EV program is thus a mystery.

[2] This problem is further exacerbated by the briefs filed by other parties. For example, the *Initial Post-Hearing Brief of Sierra Club & Natural Resources Defense Council* points out that "the National Renewable Energy Lab projects that 200,000+ EVs will be on Missouri roads by 2030[.]" *Initial Post-Hearing Brief of Sierra Club & Natural Resources Defense Council*, pg. 7. Obviously if this is correct then Ameren's claim that Missourians are not purchasing electric vehicles due to a lack of charging stations must be false.

parties to this case. First is Ameren's contention that the OPC's characterization of the EV program as a "speculative, valued added service" stems entirely from the small number of electric vehicles currently owned by the citizens of this state. *Ameren Missouri's Initial Post-Hearing Brief*, pg. 6 ("OPC attempts to recast the EV program to be what it calls a "speculative, value-added service" since the direct users of EV charging are EV owners, which today are only a small subset of Ameren Missouri's 1.2 million customers"). This is incorrect. The real reason that the OPC claims the EV program is a speculative, valued added service is because Ameren is not legally obligated to undertake the program and there is no guarantee that the program will provide actual benefits to ratepayers. *Initial Brief of the Office of the Public Counsel*, pg. 3. Understanding this fact is essential to understanding why implementing the performance based metric is justified in this scenario.

It might be easier to see the OPC's point if we compare the EV program to a traditional type of infrastructure investment. Let us assume, for example, that some large industrial customer builds a new facility in an Ameren service area that currently lacks sufficient infrastructure to serve that customer. In such a case, Ameren would be required to build up the infrastructure needed by this new customer in order to meet its obligation to provide safe and adequate service. At the same time, however, there would remain a risk that the load being generated by the new customer could disappear before the investment made by Ameren was paid off (if the customer went bankrupt for instance). Despite this, Ameren would still be capable of recovering the cost of building that infrastructure from its other customers based on

the fact that it was ***required*** by statute to make those investments. *See* RSMo. § 393.130.1. In other words, because Ameren is statutorily ***mandated*** to take on the risk that comes with building new infrastructure, it is entitled to demand recovery from its ratepayers ***regardless*** of whether the risk pays off, thus shifting the risk onto customers.[3] This *quid pro quo* exchange of the opportunity for the utility to recover regardless of outcome for the utility's guarantee to provide service on behalf of its customers is one of the factors that lie at the very heart of the entire public utility regulatory scheme.

The EV program, by contrast to the above example, is not required by any statutory authority. It is a program that Ameren is voluntarily choosing to provide based on a belief that the program will boost revenues to the company while incidentally benefiting ratepayers. Because this program is not ***required*** of the company, Ameren lacks justification for demanding that ratepayers cover the cost of the program even if those customers end up being worse off because of it. That is the reason why the OPC contends that the EV program is a speculative, valued added service. *See Initial Brief of the Office of the Public Counsel*, pg. 3. However, the OPC is ***not*** arguing that the EV Program's nature as a speculative, value added service means that it necessarily should be denied. On the contrary, the OPC argues that Ameren ***should*** be allowed to gamble on the success of the EV program, provided it does so with shareholder and not ratepayer money. It is for this very reason that the

[3] While Ameren's ability to recover does shift the risk onto customers, Ameren is still obligated to mitigate that risk as much as is reasonably possible. This is what is meant by the requirement that such investments be made "prudently."

OPC argues the performance based metric should be incorporated into Ameren's proposal to ensure that Ameren's ratepayers are not forced to bear the risk that the EV program might fail. *Id.*, pgs. 22 – 25.

Another point in Ameren's brief that the OPC takes issue with is the statement on page 10 wherein Ameren claims the OPC supports its position that the electric vehicle market will self-correct the lack of charging infrastructure due in part to the Volkswagen Electrify America settlement. *Ameren Missouri's Initial Post-Hearing Brief*, pg. 10 ("The best Staff or OPC can do in support of their supposition that the market will magically solve the problem on its own is to point out that there has been some limited development because of Volkswagen's ("VW") Electrify America"). To be clear, neither the initial rebuttal testimony of Dr. Marke, the supplemental rebuttal testimony of Dr. Marke, the OPC's *Position Statement*, nor the OPC's *Initial Brief* discusses the Volkswagen Electrify America settlement at any length. While the OPC does consider the Volkswagen issue of interest (and does not contest the testimony by Staff witnesses regarding the same), the issue is ultimately irrelevant to the OPC's argument. That argument, again, is that the lack of charging stations in Missouri will self-correct as a result of the rapid increase in electric vehicle adoptions that Ameren itself has predicted. *Initial Brief of the Office of the Public Counsel*, pgs. 9 – 10.

Ameren has made it clear that it expects the number of electric vehicles owned ***within its service territory*** will climb as high as 25,000 in ten years without the introduction of this program. Ex. 6, *Direct Testimony of Steven M. Wills*, pg. 28 lns.

21 – 23 ("Looking forward to the level of vehicles contemplated over the first decade of the proposed program, the Company's base forecast suggests almost 25,000 electric vehicles will be in the service territory by 2028.") Other parties to this case have claimed numbers that are even higher. *Initial Post-Hearing Brief of Sierra Club & Natural Resources Defense Council*, pg. 7 ("[T]he National Renewable Energy Lab projects that 200,000+ EVs will be on Missouri roads by 2030[.]"). At the same time, Ameren claims that the only reason electric vehicle charging stations are not being built in Missouri is because there are not enough electric vehicles for third parties to justify the expenditure. *Direct Testimony of Steven M. Wills*, pg. 19 lns. 18 – 21. ("Third party charging providers simply will not focus their efforts and investments in markets like Missouri - without incentives to do so - for years to come due to low EV adoption rates relative to other markets."). Therefore, it should be painfully obvious that if Ameren's predictions come true, the problem currently preventing electric vehicle charging station deployment by third parties will have been alleviated, thus allowing the market to self-correct.

Of course, it is important to remember that, even with all of the explanation provided above, the OPC is ***still*** asking the Commission to approve Ameren's EV program so along as the performance based metric is incorporated. That is because the OPC is willing to give Ameren the benefit of the doubt regarding their argument that charging stations will not be built without the utility offering rebates provided ratepayers are held harmless. *Initial Brief of the Office of the Public Counsel*, pg. 11. The OPC simply wants Ameren to prove that building these charging stations will

result in the number of electric vehicle adoptions that Ameren itself claims is necessary to cover the cost of the program.[4] Hence, the performance based metric.

This brings us to another issue in Ameren's brief that needs to be considered. On page 20 of its brief, Ameren includes a heading that states:

> The evidence shows that the EV program is likely to be cost-effective over the long term even though it is simply not practical, given the complexity of attributing any one factor to an individual buyer's decision to buy an EV, to "count the cars" to prove the incremental number of EVs that will be adopted because of the program.

Ameren Missouri's Initial Post-Hearing Brief, pg. 20. It is unclear, based on the context of the discussion following this heading, if this statement is meant to reference the fact that the OPC's performance based metric relies on the number of electric vehicles adopted in Ameren's service territory to determine the basis for

[4] On pages 13 – 14 of its brief, Ameren lays out what it claims is the "common sense" basis for why building additional charging stations will result in greater electric vehicle adoptions. *Ameren Missouri's Initial Post-Hearing Brief*, pgs. 13 – 14. This assertion can be summed up in the idea that potential electric vehicle purchasers will be dissuaded from buying out of fear that they will not be able to find a place to refuel their car and that additional charging stations will thus alleviate this fear. *Id.* The problem with Ameren's argument is that it ignores the historical reality of the automotive industry. Before internal combustion engines became the common method of propulsion, over-land travel was primarily driven by various beasts of burden such as horses. What few automobiles existed were prohibitively expensive and generally owned only by the well to do. *See, e.g.*, Vincent Curcio, *Henry Ford*, 40 (2013). The widespread adoption of the internal combustion engine did not occur until the release of the Model T by the Ford Motor Company in the early 1900s, the first vehicle that was generally affordable to the American middle class. *Id.* at 68 – 69. The important take-away here is that it was ***not*** the availability of fueling stations that prevented adoption of automobiles; it was the price. The Model T thus allowed internal combustion engines to become the dominant method for land-based propulsion even without automobile companies running about at the turn of the twentieth century building gas stations to encourage adoption. Indeed, gas stations did not become commonplace until ***after*** the demand for them had been created due to large-scale adoption of internal combustion driven cars. None of this should be surprising, given that innovation and development to meet demand is exactly how a free-market is supposed to work. Ameren's proposal to build charging stations and thus generate a supply of fuel in order to encourage demand in the form of greater electric vehicle adoption is therefore completely backwards.

Ameren's recovery. However, the OPC will presume that it does and respond accordingly.

The direct testimony of Ameren's witness Mr. Steve Wills includes the following question and answer:

> Q: That potential for high levels of adoption under the right circumstances brings a good opportunity to discuss the second rationale you provided at the outset of this section of testimony for the Company's investment in EV charging. You suggested that it would provide rate benefits to all customers if enough new vehicles entered the service territory as a result of the Charge Ahead – Electric Vehicles program. Given the margin each new vehicle contributes to the recovery of the fixed costs of the system, how many incremental new vehicles would have to result from the program for rates to be lower as a result of the program?
>
> A: Given the $11 million proposed budget, and the roughly $1,500 investment that I previously calculated could be supported by each car, simple division suggests that approximately 7,500 new cars over the life of the program would need to be added to the system for the incremental effect of the program to result in rate benefits directly arising from the program for all customers.

Ex. 6, *Direct Testimony of Steven M. Wills*, pg. 32 ln. 14 – pg. 33 ln. 3.[5] This is followed up in a footnote found on the immediately succeeding page wherein Mr. Wills testifies as follows:

> In traditional energy efficiency program applications, the RIM applies only to measures that are directly attributable to the program incentives. As I mentioned previously in testimony, the complex factors that go into a car buying decision and the fact that the Company's program is removing one of a number of barriers to such adoption, make such program attribution extremely challenging to infer. For this RIM

[5] Mr. Wills later updated this number in surrebuttal to approximately 8,900 electric vehicles. Ex. 7, *Surrebuttal Testimony of Steven M. Wills*, pg. 39 lns. 1 – 3 ("Using the conservative end of that range, the $11 million Charge Ahead-Electric Vehicles budget can be expected to be covered by the net margin arising from 8,890 EVs ($11 million/ $1,237/EV).").

> test, I am including the benefits associated with all EVs on the road in the base adoption scenario, and costs associated with all of the incentives and other costs expected to be incurred by the program. Applying the attribution concept in order to arrive at the minimum number of incremental vehicles that would have to come on to the system as a direct result of the Charge Ahead – Electric Vehicles program for the RIM test to exceed 1.0 suggests that, depending on the timing of those vehicles, between approximately 7 and 10 thousand EVs would be sufficient to produce a favorable RIM.

Id. at pg. 34 n. 14. As can be clearly seen from this testimony, Ameren is basing its claim that the EV program is cost effective on an assumption regarding the number of electric vehicle adoptions the program will induce.[6] It is thus transparently duplicitous for Ameren to claim that the EV program is cost effective based on the fact that it generates a positive RIM if a certain number of electric vehicles are adopted because of the program and simultaneously argue that the Commission should not "count the cars," *i.e.* the number of electric vehicles that are adopted because of the program. The Commission both can and should "count the cars" by considering the incremental number of electric vehicles that will be adopted because of the program, which is an integral facet of Ameren's case.

The above-discussed issues notwithstanding, Ameren's brief stays surprisingly mute on the subjects of the OPC's performance based metric. In doing so, Ameren has demonstrated that it simply does not have any good response to the OPC's proposal.

[6] The Commission should also note that Ameren doubles down on counting the number of cars in its own brief. *Ameren Missouri's Initial Post-Hearing Brief*, pg. 27. ("And it is eminently reasonable to expect that the EV program can indeed spur adoption of a mere 8,890 additional EVs over the next ten years.").

This leads to the last point that the OPC advises the Commission ponder: why is Ameren so opposed to the performance based metric?

Stop and consider the following three points. First, Ameren itself has ***repeatedly*** argued that the EV program will induce the number of electric vehicle adoptions that are required under the OPC's performance based metric to garner a full refund of the program costs. *Direct Testimony of Steven M. Wills*, pg. 33 lns. 4 – 6. ("Q: Is it reasonable to believe that more than 7,500 new vehicles will result from the Charge Ahead - Electric vehicles program? A: Absolutely."); *Ameren Missouri's Initial Post-Hearing Brief*, pg. 27. ("And it is eminently reasonable to expect that the EV program can indeed spur adoption of a mere 8,890 additional EVs over the next ten years."). Second, Ameren's brief itself points out that this program amounts to only one tenth of one percent of the utility's annual revenue requirement, meaning that even if Ameren failed to achieve full recovery its losses would be practically unnoticeable. *Ameren Missouri's Initial Post-Hearing Brief*, pgs. 1 – 2. Third, the OPC's performance based metric actually permits ***greater*** recovery than Ameren's own proposal because it would allow Ameren to recover not only the program costs and the "positive regulatory lag" that its brief identifies but also includes a separate provision for recovering financing costs. *See* Ex. 201, *Supplemental Rebuttal Testimony of Geoff Marke, PhD*, pg. 3 lns. 9 – 10 ("All expenses so booked would begin accruing interest from the date booked at a rate equal to the cost of short-term debt in effect at the time of the expenditure[.]").

Given all three of these facts, ***why*** does Ameren try so hard to fight the OPC's performance based metric? Perhaps it is because Ameren secretly doubts its own projections regarding the adoption rate of electric vehicles within its service territory. Alternatively, it could be because Ameren does not honestly believe that this program will induce greater electric vehicle adoptions. Or maybe it is simply because Ameren fears the precedential value of a decision wherein they are forced to take a stake in the outcome of their own business decisions. Ultimately, it is hard to tell. Nonetheless, the question is definitely one that this Commission should consider when preparing its order in this case.

The last comment regarding the EV program found in a brief filed by one of the other parties to this case that the OPC would like to address is from the brief filed by the Commission Staff. Specifically, Staff's brief states that "if the Commission approves Ameren Missouri's application as is, Staff would recommend adopting the Office of the Public Counsel's performance based metric, ***with a cap not to exceed 100% recovery.***" *Post-Hearing Brief*, pg. 3 (emphasis added). The OPC does not oppose the inclusion of the cap on return that Staff has suggested and indeed welcomes it as a valuable improvement on the OPC's design.

B. Charge Ahead Business Solutions Program

Ameren's brief repeatedly claims that neither the OPC nor Staff have presented evidence that proves the business program will most likely not be cost effective. *See Ameren Missouri's Initial Post-Hearing Brief*, pgs. 7 – 8; 40. This is objectively false. Both the OPC and Staff have presented significant evidence showing

that Ameren's business program is highly likely to result in a considerable if not overwhelming number of free riders. *Brief of the Office of the Public Counsel*, pgs. 28 – 45; *Post-Hearing Brief*, pgs. 7 – 9. Further, the testimony of Ameren's own witness unambiguously acknowledges that the existence of enough free riders will result in the business program no longer being cost effective. Ex. 5, *Surrebuttal Testimony of David K. Pickles*, pg. 17 lns. 1 – 2 (Identifying what percentage of free ridership would need to occur for the RIM test to fall below one, thus rendering the business program not cost effective.). Therefore, both the OPC and Staff have presented evidence showing that the business program will most likely not be cost effective.

The evidence presented regarding the high likelihood of free riders taking part in the business program was covered at length in the OPC's *Initial Brief* so it will not be repeated here save for one exception. The OPC's *Initial Brief* drew specific attention to the fact that Ameren's proposed tariffs did not require the kind of "anti-free rider" investigations that were posited by Ameren's witness Mr. Pickles in both surrebuttal testimony and at the evidentiary hearing. *Brief of the Office of the Public Counsel*, pgs. 42 – 43. This same point was also made in the initial brief filed by Staff. *Post-Hearing Brief*, pgs. 8 – 9. Ameren has apparently recognized this failure in its tariff because its initial brief makes a desperate attempt to modify its proposed tariffs after the fact. *Ameren Missouri's Initial Post-Hearing Brief*, pgs. 42 – 44. In doing so, Ameren has highlighted a number of additional concerns and posed a significant problem for this Commission.

To begin, the Commission should consider Ameren's *post hoc* attempt to fix its poorly written business program tariff as a tacit admission of the point raised in the initial briefs filed by Staff and the OPC. That is, while Ameren may pretend that it was always its intention to guard against free riders in the business program, the fact that it feels the need to change its tariff to actually articulate this demonstrates that, as written, there is nothing in the tariff that would require the anti-free rider investigation that Ameren claims and there is nothing to prevent would-be free riders from being eligible to receive incentives under the program. This, the Commission may recall, was the third legal conclusion that was drawn in the OPC's *Initial Brief* with regard to the business program. *Initial Brief of the Office of the Public Counsel*, pg. 43. Ameren has now all but explicitly admitted the truth of this conclusion.

The second point that the Commission should consider is how this eleventh hour attempt to change the tariff further undermines the testimony of Ameren's witness Mr. Pickles. In his surrebuttal testimony and at the evidentiary hearing, Mr. Pickles claimed that the requirements Ameren is now seeking to explicitly incorporate essentially already existed as part of the tariffs. Tr. Vol. II, pg. 189 lns. 14 – 17. ("We ask them a variety of questions that screen them to really demonstrate that no, this person was not considering electric. They really would have been going internal combustion."); Ex. 5, *Surrebuttal Testimony of David K. Pickles*, pg. 16, lns. 12 – 15. ("Buyers who are expanding a fleet or constructing a new facility will be asked a series of questions to establish their intent prior to the purchase, to attest to the fact that absent the program they would have been less likely to purchase an

electric forklift, and in certain circumstances investigations into corporate policies and procurement practices will be conducted."). Ameren is thus attempting to modify its tariffs after the fact in order to match Mr. Pickles' prior testimony. This clearly means that Mr. Pickles' prior testimony was incorrect when it was first given, which should not surprise the Commission as the OPC has already pointed out Mr. Pickles propensity to misstate factual information. *See Initial Brief of the Office of the Public Counsel,* pg. 31, 35 n. 8. The Commission should thus dismiss the testimony of Mr. Pickles because it lacks the necessary competency upon which to base a decision.

While both of the preceding concerns are worthy of the Commission's attention, the primary issue that needs to be addressed is the procedural problem that has been created by Ameren's request to change it tariffs. All of the evidence presented and testimony adduced up to this point has been based on Ameren's proposed tariffs as written. The OPC has consequently not been given any opportunity to present evidence regarding these new tariffs, which it certainly could and would do had it the chance. Nor does the OPC believe that these new tariffs are capable of fully remedying the problems that were previously identified in the business program. For example, these new tariffs would give Ameren ***sole*** control over determining whether a program participant would or would not be a free rider and offers no criteria for how Ameren is to make that decision.[7] *Ameren Missouri's Initial Post-Hearing Brief*, pg. 43 ("Customers who, ***in the Company's sole judgment***, are deemed likely to

[7] There is an argument to be made that this modification should necessarily prevent Ameren from allowing the business program subsidies to be applied to any potential purchaser who initiates contact with Ameren. After all, any customer who contacts Ameren is clearly considering the purchase of electric equipment at some level or else they would not bother inquiring after the subsidies.

have purchased the electric technology in the absence of the incentive offered by the Program shall be ineligible to receive an incentive." (emphasis added)). This type of concern would have been an important point of discussion in the OPC's testimony if these new tariffs had been proposed in the evidentiary phase of this case thereby providing the OPC an opportunity to submit responding evidence.

Ameren should be well aware that the initial brief following an evidentiary hearing is not the appropriate place to start changing fundamental aspects of their case. Moreover, allowing these changes without giving any of the other parties the opportunity to present evidence regarding them would represent a serious legal error. The Commission should thus dismiss out of hand Ameren's frantic attempt to salvage its clearly broken tariff and should instead reject the business program outright. If Ameren wants to make the changes that it now concedes need to be made, then the proper course of action would be for Ameren to withdraw this case and refile with properly written tariffs.

Conclusion

While the OPC has laid out its concerns with several of the statements made in Ameren's brief, this should not be construed to mean that the OPC does not object to the remaining portions of Ameren's brief.[8] The fact is, to properly explain every error in Ameren's initial brief would require ***extensive*** discussion and would necessitate the reiteration of many of the points already made in the OPC's *Initial*

[8] In a similar vein, any silence on the part of the OPC regarding any portion of the briefs filed by any other party to this case should not be considered acceptance or agreement by the OPC.

Brief. Therefore, the OPC again states that, for the most part, it continues to stand on the arguments and evidence presented and cited to in its *Initial Brief*.

In closing, the OPC will leave the Commission with this summary concerning the two separate programs Ameren has requested. First, regarding the EV program, the OPC would again remind the Commission that the question it should consider is not "what is the likelihood of success for the program" but rather "who should bear the risk that the program may fail." The OPC continues to argue that Ameren, being the party who voluntarily undertook the program, should bear that risk and therefore requests the Commission approve the EV program but require Ameren to take responsibility for it by incorporating the OPC's performance based metric. As for the business program, the OPC maintains that this program is poorly designed (a fact that Ameren itself appears to concede given that it spends its time in its initial brief attempting to redesign its program) and should thus be rejected in its entirety.

WHEREFORE, the Office of the Public Counsel respectfully submits the forgoing *Reply Brief* for consideration by the Commission.

Respectfully submitted,
OFFICE OF THE PUBLIC COUNSEL

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CERTIFICATE OF SERVICE

I hereby certify that copies of the forgoing have been mailed, emailed, or hand-delivered to all counsel of record this 17th day of January, 2019.

/s/ John Clizer