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 Program.)	

AMEREN MISSOURI'S INITIAL POST-HEARING BRIEF

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COMES NOW Union Electric Company d/b/a Ameren Missouri ("Company" or "Ameren Missouri"), and for its initial post-hearing brief, states as follows:

I. <u>INTRODUCTION</u>

The Company's application in this case seeks Commission approval of tariff sheets reflecting two new (for Missouri) and innovative pilot-scale programs designed to advance certain policy objectives, including beneficially meeting the changing service needs of the Company's customers, enabling better and more efficient use of the Company's electric system, reducing overall energy consumption, providing extensive environmental benefits, and promoting the types of flexible electric loads that are foundational to building the smarter electric grid of the future that will reliably and cost-effectively integrate more intermittent, renewable, and distributed generation resources. Those programs are an electric vehicle charging station incentive program (the Charge Ahead – Electric Vehicles program, or "EV program") and a beneficial or efficient industrial equipment incentive program (the Charge Ahead - Business Solutions program, or "Business Solutions program"). The program investments for these two time-limited (five years) programs are modest, totaling a maximum of just \$18 million over five years—an average of \$3.6 million per year, or approximately one-tenth of one percent of

¹ The Company also asks the Commission to approve the changes to its non-residential line extension tariff sheets under the terms reflected in the Second Stipulation and Agreement entered into by certain parties (and which is unopposed) on October 12, 2018.

Ameren Missouri's annual revenue requirement.² That is the very most that these programs could cost customers, even based on the unrealistic assumption that they will provide no benefits at all to customers. By approving these programs, the Commission can show its support for the policies reflected in the programs' designs while gaining valuable experience.

While the evidence strongly suggests the programs will be economically beneficial and result in rates that are lower than they otherwise would be by creating more electricity sales over which to spread the Company's fixed costs (i.e., that they are cost-effective from a dollars and cents perspective), it is of course true that, like most things in life, there are no guarantees respecting exactly how the program economics will play out. The programs' economics could be less favorable or more favorable than estimated by the Company. The evidence supports the conclusion that they are likely to be more favorable, but the fact that the future economics are uncertain is not at all unusual, and is true for virtually any kind of utility investment or program that will operate during what is inherently an uncertain future. Despite Staff's and the Office of the Public Counsel's ("OPC") opposition to the programs' details as-filed, the Commission should not allow itself to be deterred from supporting the programs' policies by the possibility that the programs' economics could turn out less favorable than predicted. Such an aversion to risk in approving innovative programs in and of itself creates a greater risk – the risk that Missouri will continue to fall behind other states through inaction in the face of clearly beneficial new or improved technologies. Moreover, as discussed below, the Commission should also be mindful of the fact that the benefits of the programs and the needs they are designed to meet are not solely based on program economics but also rest on other relevant policy and public interest considerations. For example, the electric vehicles and electric equipment that will be enabled

² Ex. 1 (Byrne Surrebuttal), p. 5, l. 18 to p. 6, l. 9.

through these programs will improve the environment by materially reducing total emissions—and those environmental benefits will further improve as Ameren Missouri's generation fleet becomes "greener." Moreover, electric vehicles and electric equipment will have *zero* emissions at the location where they are being used, improving the comfort and health of pedestrians, workers, and anyone else who is around the vehicles and equipment.⁴

The question before the Commission in this case is not whether the Commission can be *certain* of the forecasted financial benefits or whether the proposed programs are *perfect*; the question is: Has the Company put forward a prudent, reasonable proposal? Here, an objective examination of the record – unburdened by excessive hand-wringing, paralysis by analysis, undue concerns about a myriad of "what ifs," and the general ultra-conservatism reflected in both the Staff's and OPC's positions – leads to the conclusion that the Company has indeed put forth a prudent, reasonable proposal, which is likely to generate benefits worth the cost while also promoting worthwhile and important policies in the state. Failure to act in the face of rapidly maturing emerging technologies will only hold Missouri back from reaping the benefits that other states are already experiencing.

A. The Charge Ahead - EV program.

The EV program would provide incentives to private persons or entities to develop EV charging stations throughout the Company's service territory. Four categories of charging stations would be eligible for incentives: corridor charging, workplace charging, around town (also called "public") charging, and multi-family housing charging.⁵ The proposed tariff sheets set limits on the incentives that are available and set a not-to-exceed budget for each of the four

³ Ex. 2 (Justis Direct), p. 3, 1. 1 to p. 4, 1. 7; Ex. 4 (Pickles Direct), p. 6, 1l. 21-23.

⁴ *Id*

⁵ See the tariff sheets attached to the Company's Application and Mr. Justis' direct testimony (Ex. 2) (specifically pages 31 to 39) for additional details.

charging station types and, in the case of the corridor charging program, calls for a reverse auction approach to determining the incentives that would be available (up to a cap per station) in order to ensure that the competitive market determines the amount of incentive necessary to actually get the charging station built.⁶

In considering the merits of the EV program as proposed, the Commission should be mindful of the context in which this case arose. This case reflects at least the third electric utility proposal in the past approximately three years where an attempt is being made to meet the needs of customers that own or would benefit from owning an EV and to otherwise gain the benefits EVs can bring to the state. The prior attempts were rejected over concerns of a lack of legal ability to allow electrical corporations to own charging infrastructure, coupled with concerns that if utility ownership existed there would be competition with the private charging market in a way that a majority of the then-commissioners did not favor. Not all of the then-commissioners shared those views, as evidenced by Commissioner Rupp's dissent in Ameren Missouri's first EV case, File No. ET-2016-0246, but regardless, the Commission's rulings thus far have precluded utility efforts to spur widespread EV adoption.

In the face of these earlier decisions, Ameren Missouri thoughtfully and diligently set out to develop a solution to meet its customers' changing service needs (that is, the need to be able to

⁶ *Id.*, Sheet No. 165.2.

⁷ Those perceived legal barriers were determined by the Court of Appeals not to exist. *In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service*, 557 S.W.3d 460, 469-72 (Mo. App. W.D. 2018).

⁸ It is true that the Commission approved a voluntary settlement by Kansas City Power & Light Company and KCPL Greater Missouri Operations Company (collectively, "KCPL") in their recent rate cases, but one can easily imagine that KCPL's willingness to agree to that settlement had a great deal to do with the fact that KCPL embarked on EV charger development on its own, without prior Commission input or approval. Ameren Missouri would like to bring the benefits of widespread EV adoption to its customers, but believes it is incumbent on the Commission to support those efforts to meet customers' needs in this area.

fully utilize their EVs and to take advantage of greater EV options as they become available) that would not implicate the earlier-expressed legal or competitive concerns, while also realizing the overall benefits EVs can provide to the system and the state. The Company's effort was not haphazard or random. Indeed, Ameren Missouri went straight to the market and sought the input of market experts on what it would take to develop a holistic charging network in Ameren Missouri's service territory which, in turn, would give customers enough confidence in their ability to use EVs in the same way they use their internal combustion engine ("ICE")-powered cars today so that widespread EV adoption can occur. And what did the market tell the Company? The market told the Company that:

- The Company's vision of a minimum practical network of corridor charging was generally realistic and such a network was important;⁹
- The need for financial support to get the private sector to invest in charging infrastructure that EV drivers need was substantial;¹⁰
- There needs to be a *holistic* charging network i.e., not just corridor or public around town or multi-family or workplace if the needs of current and prospective EV drivers are going to be met in this state;¹¹ and
- A pure "cover-the-line-extension cost" approach (which is what Staff characterizes as a "make-ready" model) was not going to provide enough financial support for the market to develop. 12

It was primarily those considerations that led to the development of the EV program proposal in this case. As Mr. Justis testified in response to a question from Commissioner

⁹ Ex. 2, p. 28, ll. 13-16.

¹⁰ *Id.* p. 28, 11. 16-18.

¹¹ *Id.*, p. 28, ll. 17-19, 33-37, p. 29, ll. 1-2.

¹² Ex. 3 (Justis Surrebuttal), p. 15, ll. 7-9; Ex. 7 (Wills Surrebuttal), p. 53, ll. 18-20.

Kenney: "[w]e reached out to the market to say what is it going to take [to get charging infrastructure built in this state]? And that's what [the Company's EV program proposal] you have in front of you." Notably, neither Staff nor OPC provide any evidence that rebuts any of those basic points. Instead, virtually every written or spoken word from the Staff about the EV program reflects an attempt to poke holes in one of the justifications for the program (e.g., a positive rate impact over time), while 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. But the fact remains that the needs of Ameren Missouri's customers are evolving and as its customers' electric service provider, Ameren Missouri should be taking steps to meet those needs. Taking prudent steps to ensure that a sufficient charging network exists in its service territory so it can meet the growing need of its customers to be able to take advantage of the fact that automakers are aggressively shifting their business models away from ICE-powered cars toward widespread offering of EVs is precisely what Ameren Missouri ought to be doing – and it is precisely the kind of evolution of an electric utility's service that the Commission should support.

B. The Charge Ahead – Business Solutions program.

The Business Solutions program seeks to advance policy objectives that are similar to those advanced by the EV program – meeting customers' service needs, utilizing the system more efficiently, reducing overall energy consumption through more efficient equipment, and reducing emissions. Like programs in other states, the Business Solutions program, which is based on primary market potential research in Ameren Missouri's service territory, would provide incentives to commercial customers to adopt electric equipment options (e.g., forklifts,

¹³ Tr. p. 135, l. 11-20.

truck refrigeration units, airport ground equipment) instead of equipment powered by gasoline, diesel, or propane.

Staff opposes the program primarily on what the Company believes is a completely misguided and overblown argument based on at most a vague concern about "indirect" competition with natural gas. Based on the Staff's logic on this point, beneficial electrification would be completely impossible in Missouri (unlike numerous other states that have concluded otherwise) even if from an overall standpoint such electrification is beneficial to all customers as compared to the alternative of continuing to power vehicles and equipment with less efficient and more environmentally harmful internal combustion engines. Staff also throws out several other criticisms of the program, but notably, never presents any actual evidence that rebuts the Company's analysis that shows that the program will cost-effectively generate additional margins over which to spread the Company's fixed costs (to the benefit of all customers). Staff's position basically amounts to "we would have designed a program with X, Y, and Z modifications," or "we are concerned about A, B, C." Yet Staff made no effort (despite numerous opportunities) to recommend what X, Y, and Z might be, and Staff made no concrete suggestions on steps that could be taken to alleviate concerns A, B and C. Instead, the Staff simply chose to outright oppose the program. Nor does OPC present any analysis at all – save its unsupported claim that one market (electric forklifts) is "saturated" – that rebuts any of the analyses that demonstrate the merits of the program.¹⁴

The bottom line is that the Company is proposing to implement a modest pilot-scale beneficial electrification program that (a) is similar to programs operated by many other utilities

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¹⁴ Staff and OPC will undoubtedly claim that there will be too many free riders in the program, but the uncontroverted *evidence* of record is that these free ridership claims are overblown and inaccurate and that the cost-effectiveness analyses presented by the Company persuasively demonstrate that the business program will put downward pressure on the Company's rates, plus deliver other benefits.

in other states (and, in many cases, that have been approved for inclusion in rates by the state regulatory commissions in those other states); (b) has been shown to be solidly cost-effective by the *only* financial analysis reflected in the record (expected to deliver \$1.81 of benefits for each dollar spent); (c) offers incentives only for equipment now powered by fuels that are not regulated by this Commission; and, (d) like the EV program, will provide environmental benefits by reducing overall emissions and also entirely eliminating local tailpipe emissions for the benefit of those using and working around the equipment.

II. ARGUMENT ON ISSUES PRESENTED¹⁵

1. Should the Commission approve, reject, or modify Ameren Missouri's Charge

Ahead – Electric Vehicles Program?

For the reasons given and based on the evidence outlined in this brief, the clear answer is that the Commission should approve the program.

<u>Issue 1.a.</u> Has Ameren Missouri provided evidence that there is a need for the [EV] program?

A. The EV program is needed because, without it, the market will not for the foreseeable future develop the holistic charging infrastructure that is needed to spur widespread EV adoption and meet the electric service needs of those EVs that have been adopted.

It is undisputed: Missouri's level of EV adoption is low.¹⁶ It is also undisputed that it is in those states that have supportive policies toward EVs where we see far greater EV adoption.¹⁷ Moreover, there is other empirical evidence to support Commissioner Kenney's apt reference to

¹⁵ The Company's argument generally follows the List of Issues submitted by the parties (which are italicized), but to provide clarity and improve an efficient presentation of the arguments, breaks the argument on those issues down where appropriate.

¹⁶ 34th out of 50 states. Ex. 2, p. 12; In relative terms, EV adoption in Missouri resides near the bottom of all states. Ex. 6 (Wills Direct), p. 20, Figure 3.

¹⁷ Ex. 2, p. 13, ll. 1-14, p. 14, ll. 1-24

the Field of Dreams¹⁸ because in Kansas City, when they built it, EV adopters indeed did come in significantly greater numbers. This is evidenced by, among other things, the fact that in the wake of KCPL's Clean Charge Network ("CCN") build-out, the year-over-year growth in EV adoption in the Kansas City area was from just above 60% up to nearly 80%, which was significantly higher than other major cities, including about twice as high as in St. Louis where there is no utility support for EV charging. 19 The overall growth rate for EVs in Missouri as compared to the Kansas City area is even worse than in St. Louis specifically, standing at just approximately 32%.²⁰ And, using the most recently-available figures, the year-over-year growth in Kansas City, where utility support for EV charging was provided, remains higher in relative terms to growth in most other cities, at about 55% year-over-year.²¹ For areas like St. Louis and Ameren Missouri's service territory in general where no Field of Dreams has yet been built, EV adopters are simply not coming in any significant way. Staff and OPC may come up with all kinds of explanations for why the much greater proliferation of electric vehicles in the Kansas City area does not mean that utility involvement in spurring charging infrastructure development is needed, but the numbers speak for themselves.

Nor are the needed charging stations simply showing up in sufficient numbers on their own. Despite vague claims about a lack of need for the EV program, neither Staff nor OPC point to *any* substantial market driven (i.e., unsubsidized) EV charging infrastructure coming to the state in the two to three years since earlier efforts to obtain Commission approval for utility involvement in encouraging EV adoption were rejected by the Commission. The evidence

¹⁸ Tr., p. 262, l. 7 to p. 263, l, 5.

¹⁹ Ex. 3, p. 12, l. 3 to p. 14, l. 7.

²⁰ Ex. 300 (Kelley Rebuttal), p. 5, ll. 6-7.

²¹ Ex. 3, p. 13, Figure 4. As Mr. Justis explained, one can't expect growth rates to continue to climb. Tr. p. 125, ll. 13-14.

shows that the market has not developed on its own and there is no real evidence that it will suddenly do so in the future. 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. However, that limited development is driven entirely by (and subsidized by) the mandates reflected in settling the VW diesel testing scandal and it will produce a modest six highway corridor charging stations in the entire state.²² They also point to the possibility that over a 10-year period there may be another \$6 million of VW trust funds available (statewide) for EV infrastructure.²³ Even though the Electrify America and perhaps other VW trust funds will promote some Missouri corridor charging stations (but not enough of them, as discussed above), those funds will do nothing to address the remaining charging needed to create the kind of holistic charging network that is required to spur widespread EV adoption that is needed to deliver the benefits of EVs to the state.²⁴ As Missouri Department of Economic Development ("DED") witness Cherlynn Kelley puts it, "[t]he availability of one funding source does not make the other irrelevant. Leveraging multiple funding sources, such as that from the Volkswagen Settlement, would be the most effective means of deploying EVCS [EV charging stations] in all parts of the state in a timely manner."²⁵ And that is exactly what the Company proposes to do through its thoughtfully

²² Ex. 3, p. 6, 1. 14.

²³ Ex. 102 (Murray Rebuttal) (VW plan table), p. 4. While these VW trust funds may in fact materialize, it is noteworthy that Staff and OPC focus on all kinds of uncertainties about whether the EV program will lead to sufficient vehicle adoption or if the benefits will materialize, but when it comes to arguing that the program is not needed, they treat the VW trust funds as a virtual certainty. They are not. Tr., p. 407, ll. 17-21.

²⁴ See Ex. 2, p. 27, l. 13 to p. 31, l. 13, for a detailed discussion of what a holistic charging network is and why it is needed.

²⁵ Ex. 301 (Kelley Surrebuttal), p. 5, ll. 8-14.

designed corridor program, which includes a reverse auction feature, to accomplish the installation of charging without overpaying incentives needed to make it happen.

Other state commissions do not share Staff's and OPC's "the market will take care of itself" attitude and have clearly recognized the appropriateness of, and need for, utilities to be involved in incenting charging infrastructure to facilitate EV adoption in their respective states. Messrs. Justis and Wills outlined seven other recently-approved utility programs that are similar to the EV program proposed in this case, including two that are of similar size (in Utah and Ohio) and five significantly larger programs.²⁶ ChargePoint witness Ellis pointed to some of those same utility programs, and others, and testified that utilities in many jurisdictions have supported EV adoption through programs that do just what the EV program proposed in this case would do: enable the buildout of charging infrastructure.²⁷ As Mr. Justis explained, utility commissions in those states determined that utilities need to be engaged in order to allow the states to realize the benefits of EVs, including the California commission, which earlier (in 2011) had prohibited regulated utility ownership of EV charging infrastructure but reversed itself later. In reversing itself, the California commission stated as follows: "[w]e . . . endorse an expanded role for utility activity in developing and supporting PEV charging infrastructure."28 As Mr. Justis described the California commission's conclusion in response to questions from Commissioner Kenney: "[t]hey [California] weren't reaching goals [for EV adoption]. The state was very interested in reaching goals and they said we need to reverse [the earlier decision not to sanction utility involvement]. Utilities, you need [to] get involved. Please provide us pilot

²⁶ The programs are summarized in Ex. 2, pp. 15-17 (Table 2), and discussed by Mr. Wills. Ex. 6, p. 41, ll. 18-22, p. 42, ll. 15-23, p. 43, ll. 1-21. See also Tr. p. 279, l. 9 to p. 280, l. 3.

²⁷ Ex. 650 (Ellis Rebuttal), p. 15, l. 22 to p. 16, l. 5; Ex. 651 (Ellis Surrebuttal), p. 3, ll. 11-17.

²⁸ Ex. 2, pp. 17-20 (specifically, p. 18, ll. 18-20).

programs. So I even use that as an example on why we [Missouri utilities] need to get started here."²⁹ Mr. Justis' pre-filed testimony also highlighted the conclusion of the Massachusetts commission that utility involvement is in the public interest, that the involvement is needed, and that it was not anti-competitive.³⁰

The state of Missouri has also enunciated its policy support for EVs and associated charging infrastructure. The Missouri State Comprehensive Energy Plan, issued by the Missouri Department of Economic Development ("DED") in 2015, concludes that "Electric vehicle charging stations need access to the electric grid and will likely impact the design, operation and cost of the grid. Due to this interrelation, electric utilities are uniquely positioned to help support electric vehicle infrastructure and charging station networks" (emphasis added). DED continues to hold the same views. As DED witness Kelley testified, "[t]he lack of EVCS in necessary locations and the funds to build out the infrastructure threatens our preparedness to meet the growing market trend toward EVs. The lack of infrastructure can also make purchasing an EV in rural or suburban areas less feasible to potential buyers, and those who travel long distances may also see EVs as an impractical option and/or choose not to travel through Missouri." Consistent with the Company's position and evidence in this case, DED clearly shares the view that utilities need to be involved in spurring EV adoption:

The benefits made possible through EV deployment outweigh the challenges of creating a supportive infrastructure system. If left only to the private sector, investment in EVCS infrastructure will be limited and inequitable, *necessitating utility involvement* (emphasis added).³³

²⁹ Tr. p.134, l. 17 to p. 135, l. 4.

³⁰ Ex. 2. p. 18, l. 23 to p. 19, l. 4.

³¹ *Id.*, p. 9, ll. 12-21 (citing p. 104 of the Missouri State Comprehensive Energy Plan).

³² Ex. 300 (Kelley Rebuttal), p. 5, 1. 7 to p. 6, 1. 5.

³³ *Id.*, p. 11, ll. 17-20.

And as noted earlier, Commissioner Rupp's dissent in Ameren Missouri's prior EVrelated docket clearly reflects his recognition of the need in Missouri, as do, arguably,

Commissioner Hall's comments in connection with a prior emerging issues workshop (File No.

EW-2017-0235) where he suggested considering line extension or other "make-ready" (which in
that context focused on line extension) policies as a means of stimulating charging infrastructure
development.³⁴ While the evidence in this case shows that a mere line extension approach
(essentially what Staff calls a "make-ready" approach) is insufficient to spur the needed charging
infrastructure development, the point is that the comments reflect a recognition of the need for
utilities to play a role in getting needed charging infrastructure in place because the market
simply isn't bridging that gap by itself. And in discussing range anxiety with Ameren Missouri
witness Tom Byrne, Commissioner Kenney indicated that he understands the problem of range
anxiety and indicated that the fact that the problem exists "makes complete sense." Staff and
OPC simply ignore the problem despite evidence (corroborated by common sense) that the
problem does indeed exist and will not be solved in any material way absent utility involvement.

Why does this need exist? Putting aside Staff's hyper-technical analyses and scenarios and OPC's skepticism (backed by nothing more than OPC witness Dr. Geoff Marke's opinion, which itself isn't backed-up by record evidence) that a need for utility programs like the EV program exists *is basic common sense*. If today any one of us gets in our car and wants to take a trip anywhere in the state, we don't think about not being able to stop at a gas station/convenience store to fill up. Even in towns that are quite small, there is usually a Casey's or other convenience store readily available 24/7, 365 days per year. When someone considers

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³⁴ Ex. 6, p. 8, ll. 15-21.

³⁵ Tr. p. 106, ll. 9-15. Commissioner Kenney also indicated his understanding of the importance of EV charging infrastructure to EV adoption based on his personal experience. Tr. p. 260, ll. 13-21.

purchasing an ICE-powered car, the method of fueling and worries about the driving range of the car simply don't enter the prospective buyer's mind. This is because we are all deeply familiar with traditional ICE-powered cars, we know how they perform, and we know we can refuel them when and where needed. Moreover, today that ICE-powered car is significantly cheaper in initial price than a comparable EV, albeit there may be advantages of the EV (efficiency, zero emissions, lower maintenance costs, etc. ³⁶) that could offset this up-front cost issue in whole or in part, if we understood them and were comfortable with them. But until the necessary holistic charging network is in place, that understanding and comfort will be significantly hindered, keeping beneficial EV adoption low.

Not only does common sense tell you that barriers to EV adoption exist and need to be overcome, but there is record evidence to back up that sensible conclusion. Mr. Justis testified that there are three key barriers: lack of consumer awareness and understanding of EV performance, the initial cost, and a real lack of sufficient and suitable charging infrastructure.³⁷ Mr. Justis backed up his contention that a lack of suitable charging infrastructure is a significant barrier with data, including a 2016 Union of Concerned Scientists and Consumer Union survey of households (in states where one might expect the states' citizenry to tend to be more open to EVs – California and nine Northeast states) which concluded that the biggest concern about owning an EV is that, "there are too few, if any, public charging stations where I travel."³⁸ Another expert in the EV space, ChargePoint witness James Ellis, confirmed that while a lack of

³⁶ Ex. 2, p. 7, 1. 12 to p. 9, 1. 7

³⁷ *Id.*, p. 20, ll. 6-10.

³⁸ *Id.*, p. 20, ll. 14-21.

infrastructure alone is not the only barrier, lack of infrastructure *is* a barrier, and indeed is one of the three *primary* barriers.³⁹ DED's expert expressed the same view.⁴⁰

How are these barriers going to be removed? Despite talking about these issues for several years now, the barriers have not come down in any significant way. As earlier noted, Electrify America is installing just six corridor chargers and the VW trust funds might provide \$6 million – perhaps half of the dollars needed – to get to a minimum practical corridor network of 40 charging islands statewide, assuming those funds end up being available over the 10-year period the VW trust will operate, which is itself not certain. But even if that scenario plays out perfectly, for the corridor needs alone, that would leave the state at least 17 corridor stations short that would need to be made up by Missouri utilities participating in the EV Collaborative that Ameren Missouri is leading. 41 Ameren Missouri's incentive budget for corridor charging of \$4 million is sufficient to fund about 11 corridor stations within Ameren Missouri's service territory (which, as the Commission knows, reaches across a huge area of the state from the Bootheel to Kirksville to the Lake of the Ozarks to St. Louis). This provides both the potential for the majority of funding to be secured, and certainly for Ameren Missouri to provide the leadership among the EV Collaborative utilities to encourage other entities to bring additional funding to the table. 42 And keep in mind, aside from Tesla's proprietary network, there is no public fast charging available between St. Louis and Kansas City or Kirksville and Springfield.⁴³

³⁹ Tr. p. 307, l. 21 to p. 309, l. 2.

⁴⁰ Ex. 300, p. 4, 11. 1-4.

⁴¹ Ex. 3, p. 8, ll. 4-21 (At a \$12 million estimated cost for 34 more stations, \$6 million of VW trust funds would fund about 17 stations).

⁴² *Id*.

⁴³ While there is some public fast charging available in the St. Louis area, many of them are at car dealerships and not publicly available in the way that a gas station is publicly available for an ICE-powered vehicle or a true public charging station would be available. Ex. 2, p. 34, l. 1-6.

Four or five of the Ameren Missouri-incented corridor charging stations would help fill that gap in charging infrastructure.⁴⁴

Staff and OPC claim (actually they speculate) that the needed charging facilities are going to be constructed anyway, but they don't back those claims up with any real evidence. Staff witness Murray focuses only on Electrify America and VW trust funds which, as already explained, can be leveraged to provide *some* needed charging (if the VW trust funds materialize), but are alone clearly insufficient. Staff witness Sarah Lange doesn't address the "it will happen anyway" issue at all, but instead puts forth analysis after analysis of "what if" cost/benefit scenarios that she does not claim to be realistic or even likely. ⁴⁵ And the only other Staff witness, Robin Kliethermes, doesn't address the merits of the EV program at all, favoring yet more talk but without any assurance that all this talk (which has been occurring for years now) would actually result in any action toward solving the problem. OPC witness Marke similarly provides no evidence that the necessary charging infrastructure will appear without Ameren Missouri's program and, in fact, doesn't outright oppose the program. He does, however, condition his lack of opposition by proposing to force the utility to bear the risk of providing a new service regardless of the prudence and reasonableness of the program. But, as Mr. Byrne points out, the Commission's job is to evaluate the evidence and, if it decides that the greater weight of the evidence indicates the utility is making a reasonable and prudent decision on investments to serve its customers, to approve the program even if, as earlier discussed, it cannot be 100% certain of the result.⁴⁶ There is also no other credible evidence that without programs like this the necessary EV charging infrastructure will magically appear.

⁴⁴ Ex. 8.

⁴⁵ Tr., p. 454, l. 17 to p. 455, l. 9.

⁴⁶ Tr. p. 103, ll. 20-24.

For example, when given a chance by Chairman Silvey to identify other charging networks in the state (beyond the KCPL CCN and Tesla's proprietary network), ChargePoint's Mr. Ellis was not aware of any.⁴⁷ There is little doubt that it would be Mr. Ellis' job to be aware of such activity and the fact that he isn't confirms what the Company's evidence shows: there isn't any. And that in turn confirms what Ameren Missouri has been saying all along: without incentives, building charging stations in Missouri in sufficient numbers to make a difference just isn't economic. 48 The Chairman went on to ask Mr. Ellis about ChargePoint's expected activity if the EV program were not approved, and the very careful way in with Mr. Ellis answered that question speaks volumes: "ChargePoint will continue to make our products and services available with or without this program" (emphasis added).⁴⁹ Undoubtedly ChargePoint will continue to make its products and services "available," but the "availability" of its products and services says nothing about whether any material number of customers will take advantage of that availability and actually build the kind of charging infrastructure the state needs to gain widespread EV adoption in the absence of programs like the EV program proposed in this case. And it was clear from the rest of Mr. Ellis' answer that the program would accelerate the actual purchase of those products and services, although understandably Mr. Ellis was reluctant to publicly state that without the program, ChargePoint's market would be poor.⁵⁰ What we do know is that when ChargePoint sold KCPL significant equipment and services, those sales were because KCPL decided to embark on an EV charging effort without Commission support and

⁴⁷ Tr. p. 306, ll. 13-21.

⁴⁸ Mr. Wills illustrates the point with a corridor charging example at p. 52, l. 8 to p. 53, l. 17 of Ex. 7, where he presents an overly conservative (i.e., more favorable than likely realistic) example of the poor economics of a corridor charging station without incentives and the negative 2% internal rate of return one might expect.

⁴⁹ Tr. p. 307, ll. 1-3.

⁵⁰ *Id*, p. 307, 11. 3-6.

before it obtained a mechanism of any kind (in Missouri or Kansas) to attempt to cover the EV charging station costs. Depending on one's perspective, KCPL now has a means to attempt to recover costs, but by agreeing in a settlement to "house" the business in a single rate class, KCPL is in effect mimicking an unregulated business via a regulated service and has to depend on electricity sales from the chargers themselves to cover the costs, and it is extremely unlikely electricity sales from the chargers themselves would ever produce a "cost-effective" program.⁵¹ The Company believes that providing EV charging is a core service need of its customers that over time will benefit all customers and consequently, that the cost of doing so must be reflected in all customers' rates.

Ameren Missouri is not similarly willing to support the investment needed in its service territory without also having the Commission's support for that investment.

A, and perhaps *the*, fundamental flaw in the Staff's and OPC's positions is reflected in the flawed barber analogy posited by OPC witness Marke. Dr. Marke criticized the Company's efforts to engage those who should know the most about the economics of erecting charging stations – those that develop them – claiming that asking for their input was analogous to asking a barber if you needed a haircut. As Mr. Justis pointed out, the Company didn't ask the barber if it needed a haircut. To the contrary, the Company and everyone else willing to look can see that there are few if any barber shops located where they need to be in Missouri, and because of that

⁵¹ The after-the-fact approach taken for KCP&L is problematic not only because EV charging is a core service need, but the financial benefits of it are not primarily from additional sales at the EV chargers, but rather, is driven by additional electric sales at home which are benefitting all customers yet with such an approach all customers do not pay for the charging that enabled those sales by enabling greater EV adoption. This is why looking at these programs from the standpoint of incremental electric sales from the *chargers* is a flawed approach. Consider that the RIM test result from the EV program proposed in this case is 1.19, with 85% of the charging expected to occur at home (discussed later in this brief). Clearly that RIM test result would be less than zero if only the electric sales from the chargers counted.

obvious observation, Ameren Missouri sensibly explored what will it take to get barbers to open shops *in the first place*?⁵² As Mr. Wills' analysis showed, the economics of the "barber shops" at issue in this case aren't very good without incentives, and won't be until we as a state take steps to remove the real barriers that exist.⁵³ There is no credible evidence to the contrary.

As earlier noted, more than just corridor charging is needed and, like the current lack of corridor charging, the state isn't seeing the kind of widespread workplace, multi-family, and around town charging sufficient to produce the holistic charging network the evidence shows is needed to spur widespread EV adoption. While the Request for Information conducted by Ameren Missouri was focused on developing highway corridor charging.⁵⁴ the responses and information Ameren Missouri received in that process made clear that highway corridor charging alone was not enough.⁵⁵ DED holds the same view, confirming that it is appropriate and necessary for utilities to provide incentives for the development of EV charging infrastructure of various kinds, and this task can't simply be left to the market. DED's witness testified that currently there is a "chicken or egg" problem because consumers are hesitant to buy EVs and potential charging station developers are hesitant to invest in the charging infrastructure that would reduce consumer hesitation.⁵⁶ Ms. Kelley went on to cite a 2015 study that found that EV market diffusion (i.e., real development of the market) is only going to occur if there is a mixture of the various kinds of charging proposed in this case.⁵⁷ That same study concluded that public charging would not be economically viable for private sector investment before 2030 unless

⁵² Ex. 3, p. 14, ll. 8-22.

⁵³ *Id*.

⁵⁴ Ex. 2, p. 27, l. 13, to p. 28, l. 12.

⁵⁵ *Id.*, p. 28, ll. 13-19, 33-37, p. 29, ll. 1-2.

⁵⁶ Ex. 300, p. 6, ll. 11-17.

⁵⁷ *Id.*, p. 6, l. 17 to p. 7, l. 8.

there was financial assistance (which clearly can include the kinds of incentives the proposed EV program would offer).⁵⁸ The Company is making a modest proposal in this case to accelerate that date and asks the Commission to support that effort.

The evidence in this case as discussed above is compelling: The State's EV charging infrastructure is inadequate and until that barrier is addressed, widespread EV adoption will be hindered – all parties except Staff and OPC agree on this point. Moreover, there is compelling evidence that utilities ought to be, and need to be, involved if that barrier is going to be timely removed. Ameren Missouri is not the only party expressing the opinion that utility involvement is crucial. As earlier discussed, other state commissions have reached that same conclusion, as have DED, Renew Missouri, Sierra Club, NRDC, and ChargePoint in this docket.⁵⁹ So too should the Commission.

<u>Issue 1.b.</u> Has Ameren Missouri provided evidence that the [EV] program is cost effective?

- B. 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.
 - 1. The EV program is likely to be cost-effective from a pure dollars and cents perspective.

As noted in the Introduction, any cost-benefit analysis of an investment that hasn't been made or of a program that hasn't started yet necessarily rests on estimates about benefits to be realized in the future, with those estimates of necessity resting on assumptions. As Ameren Missouri witness Wills points out, many of the risks highlighted by Staff or OPC suggest that the

⁵⁸ *Id*.

⁵⁹ The other state commissions' agreements, as well as that of DED and ChargePoint, were addressed above. Renew Missouri witness Owens so testified (Ex. 400 (Owen Surrebuttal), p. 3, l. 21 to p. 4, l. 2), and Sierra Club and NRDC affirmatively so state in their Statement of Position.

net benefits generated by the EV program may be less than those shown by the Company's estimates. And while it is, of course, true that the benefits could be less than estimated, it is also true that the benefits could be more. The risk of the future not turning out as estimated is a bidirectional one and, in Mr. Wills' opinion, "the most likely outcome is that the Charge Ahead – Electric Vehicles program will create *much greater benefits* than those modeled by the Company" (emphasis added). The Company's Integrated Resource Plan ("IRP") presents several electric vehicle adoption scenarios. The Company's cost-benefit analysis assumed the "base case" vehicle adoption scenario from the IRP. But the IRP's "high case" of adoption could easily arise from a combination of the charging infrastructure spurred by the program and the maturing and much greater EV options for customers discussed by both Mr. Justis and Ms. Kelley. Any EV adoption above the base case will produce benefits that are greater than the Company's base case modeling has estimated.

Before delving into the modeling results that show the likelihood that the EV program is cost-effective from a purely dollars and cents perspective, the Company would point out that it is important that the Commission not get lost or distracted by the dizzying number of scenarios and array of resulting numbers produced by Staff witness Lange. Notably, Ms. Lange does not claim, as to *any* of those numbers, that the various scenarios that produced them are expected to be representative of how EV owners would charge their EVs;⁶⁴ they are truly just "what ifs." She admits that the scenarios are *not* based on any studies or other empirical observations of

⁶⁰ Ex. 7 p. 10, 11. 22-30.

⁶¹ *Id.*, p. 10, 1. 20 to p. 11, 1. 2.

⁶² *Id.*, p. 11, ll. 2-10.

⁶³ *Id.*, p. 11, ll. 2-10.

⁶⁴ Tr. p. 454, ll. 21-24.

actual EV charging patterns⁶⁵ (which means there is no basis to conclude that whatever results she obtained have anything to do with how the program would play out). Nor does Ms. Lange claim that any one of the many scenarios she generates is more likely to occur than another, and she further doesn't claim to know which (if any) of them is most likely to occur.⁶⁶

In contrast, the Company stands behind its analyses, presenting scenarios incorporating charging patterns that it does expect to occur based upon data that backs up that expectation, ⁶⁷ which rely on the same data used for its IRP and its recently-approved Missouri Energy Efficiency Investment Act ("MEEIA") filing (updated to reflect tax reform), ⁶⁸ and which are supported by a witness (Mr. Wills) who addressed head-on each and every one of the criticisms lodged in Staff's rebuttal testimony. In doing so, Mr. Wills demonstrated both the irrelevance of Staff's many analyses and the unreasonableness of the what-if assumptions that underlie them. ⁶⁹ Against that backdrop, it is important that the Commission understand a few basic facts about the modeling results in this case.

First, despite Staff's suggestion otherwise, the program's cost effectiveness results do not depend on whether the incremental electricity sales caused by EVs occurs at a charging station incentivized by the program or at the EV owner's home. The point of the program, which Staff either ignores or certainly downplays, is to develop a holistic charging network so materially more EVs will be purchased. Such a network needs to consist of four different categories of charging stations so that EV drivers can fully utilize their EVs and so that more and more car buyers will choose an EV. And that holistic network needs to be as easy to use as possible to

⁶⁵ Tr. p. 454, ll. 17-20.

⁶⁶ *Id.*, p. 455, ll. 1-9.

⁶⁷ Ex. 7, p. 33, 1. 14 to p. 37, 1. 16.

⁶⁸ *Id.*, p. 23, ll. 11-12.

⁶⁹ *Id.*, p. 18, l. 7 to p. 22, l. 15.

make it convenient and attractive for customers to choose EVs – in contrast to Ms. Lange's unsupported testimony that suggests that employers and apartment owners should require worker/tenant drivers to share plugs and adhere to pre-defined schedules regarding when they can and when they cannot charge while parked at their workplace or homes. 70 Just like home charging (even for multi-family tenants) needs to be easy, so does access to the charging network that is available when EV drivers are not charging at home so that they can recharge the EV and get to and from where they need to go. Consequently, while Staff witness Lange lodged criticism about the Company's analysis because it did not breakout "accretive energy use" (i.e., electricity sold at the incentivized *non*-home chargers), such a breakout is irrelevant to the overall economics (cost/benefit results).⁷¹ Worrying about (and throwing out numbers about) which bucket the revenues fall into is a getting-down-in-the-weeds exercise that misses the point of the program and, ultimately, has no value when evaluating this proposal. Staff's attempt to undermine the Company's modeling result is replete with these deep walks into the weeds. And, as discussed in subsection II.A above, without the program incentives the market isn't going to timely take care of the away-from-home charging problem the EV market now faces, which means the level of EV adoption needed to bring the benefits of EVs to all the Company's customers is not going to materialize, at least not for a long time.

Second, because the point of the program is to create a holistic charging network, there is also no need to walk into the weeds to individually justify the economics of each incentivized charging station or to try to count how many EVs will be adopted because of any one charging station or type of charging station.⁷² Again, trying to maximize utilization of an individual

⁷⁰ Tr. p. 475, l. 14 to p. 476, l. 12.

⁷¹ Ex. 7, p. 14, l. 5 to p. 15, l. 6.

⁷² *Id.*, p. 15, 1. 7 to p. 16, 1. 2.

charger in the ways Ms. Lange recommends (apparently to improve an individual charging station's economics), in a manner that ends up being so inconvenient as to discourage the potential driver from adopting an EV, misses the point of the program and is counter to the overall program goal of creating an environment of broad and robust EV adoption. The question is not, and never was, whether a specific corridor charging station along I-70 or another one at an apartment complex in St. Charles will, itself, generate sufficient electricity sales to cover the incentives provided to get it built or spur the adoption of X number of EVs.⁷³ The question is will the needed holistic network spur more widespread EV adoption? The market has told the Company it will, as has the higher EV adoption in other states where the states (and not uncommonly, utilities) have taken steps to put such a network in place. As Mr. Justis testified, one should not be looking at a given subprogram (e.g., workplace) but instead:

While it is fair to critique an individual sub-program, these all come together to create this holistic charging network that will allow both EV users currently to better utilize their electric vehicles, but very importantly, prospective EV buyers to see what's happening in the market, to benefit from the charging and feel comfortable they can drive their vehicle. So it not only raises awareness [regardless of a cost-benefit analysis of a given station], but it *enables them to travel* . . . [because] it's not just range anxiety to try to get across a state. It is an *actual lack of charging* [because] [y]ou cannot do it [travel] in most electric vehicles today.⁷⁴

Third, both the Company's and the Staff's analyses show that every EV that is adopted in the Company's service territory will produce incremental revenue of approximately \$262 to \$328, with a reasonable range of those revenues being from about \$286 to \$328.75 Consequently, unless the costs caused by EVs are about \$300 per EV or more (so that they will produce no margin or cause a negative margin), the dollars and cents analyses results show that adding EVs to the system is beneficial because each EV will produce a positive margin over which more of

⁷³ Tr. p. 137, ll. 18-21.

⁷⁴ Tr. p. 137, ll. 2-24.

⁷⁵ *Id.*, p. 23, 1. 7 to p. 24, 1. 12.

the Company's fixed costs can be spread and will thus make rates lower than they otherwise would be.

Fourth, when reasonable assumptions of when and where charging will occur and the rate of the charging are employed, all the modeling results (even Staff's) show that there indeed will be a positive margin from each EV (i.e., the cost will be less than that \$300). And there is no dispute: If there is a positive margin, then having the EVs on the system is allowing the Company to spread its fixed costs over more sales meaning that over time rates are going to be lower than they otherwise would be. The Company's analysis (reflected in surrebuttal testimony where it was updated to account for the reduction in the federal income tax rates) produces an average margin, after accounting for the cost of the program, in the range of \$207 to \$221 per EV.⁷⁶ Even using more pessimistic assumptions (many of which are unreasonable and which in any event reflect nothing more than "what-ifs"), Staff produced analyses showing an average, positive margin of between approximately \$107 and \$195 per EV.⁷⁷

Fifth, *any* suggestion that the Company did not include incremental transmission or distribution costs caused by EV adoption in its analyses is false. The specific discussion in Mr. Wills' direct testimony about the cost/benefit results for the program, boiled down into the Ratepayer Impact Measure ("RIM") test results he provides, specifically explains that the RIM test he employed to measure the benefits of added load from more EVs includes "incremental energy, capacity, *and T & D costs* incurred to serve the load" (emphasis added).⁷⁸ Mr. Wills

⁷⁶ Ex. 7, p. 38, ll. 4-13.

⁷⁷ Ex. 101 (Lange Rebuttal), p. 6.

⁷⁸ Ex. 6, p. 16, l. 1 to p. 17, l. 8 and, in particular, p. 17, ll. 3-5. See also p. 34, ll. 8-10 (RIM test results used incremental cost curves (which include incremental T & D costs) from the 2017 IRP), and Ex. 7, p. 25, l. 3-20 (also specifically confirming that "transmission and distribution ("T & D") costs" were used in the RIM test results).

went on to point out that in including all of those components in his RIM results, he is taking exactly the same approach taken when one examines the cost-effectiveness of load reductions (e.g., from energy efficiency).⁷⁹ In other words, the Company did not cherry pick only certain costs generated by the program; it included them all, including incremental transmission costs and incremental distribution costs arising from increased EV load in the very same manner that it calculates avoided transmission and distribution benefits associated with load reductions arising from energy efficiency programs.

Sixth, the Company's analysis shows a positive RIM test result of 1.19, meaning that over time the program is expected to create at least \$1.19 of benefits for every dollar spent on it. ⁸⁰ Moreover, as noted earlier, keep in mind that the Company's analyses assume EV adoption in Missouri at the base case reflected in the 2017 IRP and that today – without the support of the EV program in place – adoption is already in line with the base case level. ⁸¹ This means that spurring development of a holistic charging network to alleviate the "insufficient charging" barrier to more widespread EV adoption should lead to EV adoption well above the base case, which is one of the reasons Mr. Wills opines that he expects the cost-effectiveness of the program to be greater than predicted. ⁸² As updated in Mr. Wills' surrebuttal testimony (again, the update primarily being driven by accounting for the change in federal tax rates), it will only take about 8,900 EVs in the service territory to make the \$11 million investment in the program

⁷⁹ Ex. 6., p. 16, l. 25 to p. 17, l. 5.

⁸⁰ Ex. 6, p. 34, ll. 5-14. After, primarily, adjusting the costs and revenues that drive the margin per EV to account for the change in the federal tax rate, the RIM test result would change some. In fact, because the adjusted costs went down more than the adjusted revenues, the RIM improves from the value calculated for the Company's direct case.

⁸¹ *Id.*, p. 30, 11. 7-9.

⁸² *Id.*, p. 30, ll. 9-12.

worth it.⁸³ And it is likely that the adoption level will be much higher since without the program EV adoption is on track to achieve the base case level of 24,516 EVs 10 years from now. Because just 8,890 cars support the EV program's \$11 million cost (over 5 years), adoption above the base case (over 24,516 and up to 48,638) would conservatively support a far higher investment ranging from \$30.3 million to \$60.2 million.⁸⁴

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. As Mr. Wills puts it:

While I believe it will be very hard to infer the precise motivations behind different EV owners' decisions to purchase their cars, such that it is unrealistic to "count the cars" that resulted from the program, it is clear that addressing the barriers to EV ownership which Mr. Justis identified can move the needle on local EV adoption. There are numerous studies that support this conclusion. * * * Recall for a moment the difference between the Company's base and high adoption forecast for EVs in the 2017 IRP. The high case 2028 vehicle total of almost 49,000 is nearly double the base case projection for the same year. If the Company's program is responsible for shifting the local adoption trajectory from the base to high case, which is reasonable given the observations about differing regional adoption levels already cited, well above the [8,890⁸⁵] cars that I just calculated would come onto the roads in Ameren Missouri's service territory. Under this very plausible outcome, the direct benefits of the Company's Charge Ahead – Electric Vehicles investments would more than pay for the costs of incentives reflected in customer rates. ⁸⁶

2. There is significantly more to be considered in the Commission's decision respecting whether to approve the EV program than simply dollars and cents analyses of program cost-effectiveness.

One of the "inputs" into any regulatory commission's decision on whether to approve a new program is usually (and properly) an evaluation of financial analyses about the predicted and estimated long-term financial impacts of the decision. It is completely fair for the Commission to consider those analyses' results and the Company encourages the Commission to

⁸³ Ex. 7, p. 39, ll. 1-3.

^{84 \$30.3} million/1,237 = 24,516 EVs; \$60.2 million/1,237 = 48,638 EVs.

⁸⁵ As updated in surrebuttal testimony.

⁸⁶ Ex. 6, p. 33, l. 4 to p. 34, l. 1.

look closely at those results. But regulation of public utilities necessarily involves far more than picking and choosing winners in a debate about numbers, and that is certainly true here.

EVs are in the process of taking a much more prominent place in the transportation mix in this state (and in the country and indeed the world). In support of this fact, Mr. Wills and Ms. Kelley of DED both pointed to reputable outlooks for EV proliferation in the coming years, and to the concrete steps being taken by the major automobile manufacturers to transform their offerings from ICE-powered cars to EVs.⁸⁷ Ms. Kelley specifically references \$4.5 billion in EV-related investments being made by Ford, and General Motors Company's vision for an "all-electric future." As earlier discussed, other state commissions have clearly acknowledged that their utilities have an important role to play in ensuring development of the charging infrastructure that is needed to allow EV owners to utilize their cars and to ultimately bring the benefits of widespread EV adoption to their states.

To put it bluntly: Staff and OPC are simply wrong in taking the position (more muted in the Staff's case, but still audible) that because EV adoption is relatively new and EV owners today make up a relatively small subset of electric customers, electric utility programs to support EV adoption should be held to a higher standard; i.e., must be forced to leap over a higher bar before they can be approved. Utilities have always played an important role in the development of the infrastructure the state needs for its citizens to consume the electricity they rely upon to power a myriad of electric appliances, devices, and equipment. In this particular case, the Company is proposing to get that needed infrastructure built by providing incentives to a market (charging developers) that can't justify the investment on its own. Providing incentives for infrastructure is of course *functionally* different than building an electric line but, in the end, both

⁸⁷ Ex. 6, p. 31, l. 6 to p. 32, l. 13; Ex. 300, p. 6, ll. 6-10.

⁸⁸ Ex. 300, p. 6, ll. 6-10.

approaches are accomplishing the same thing: putting in place electric infrastructure that customers will use.

No one in this case has challenged the many benefits EVs are bringing and will bring to the state as there is greater EV adoption, including benefits to electric customers who have or want to have one, and benefits to customers overall, whether those benefits are purely financial or are reflected in lower emissions, less noise, etc. The benefits of EVs include:⁸⁹

- They have far greater efficiency they convert about 60% of the energy they consume to power at the wheels as compared to about 20% for an ICE-powered car;⁹⁰
- They lower overall emissions even with Missouri's current generation mix, EVs produce about 50% less NOx than an ICE-powered car and somewhat less CO2, 91 and the NOx reductions when considering Ameren Missouri's generation mix as compared to the state's mix overall are even greater; these emission reductions will only continue to improve relative to ICE-powered cars as Ameren Missouri adds more renewable generation, which it is doing in a significant way; 92
- They eliminate ground-level tailpipe emissions which also provide health benefits for all of us, and reduce noise pollution as well;⁹³

⁸⁹ The following list of benefits is supported by the Company's evidence, but the Company is not the only party to provide such evidence. See DED witness Kelley's rebuttal testimony, Ex. 300, p. 9, l. 1 to p. 10, l. 4.

⁹⁰ Ex. 2, p. 5, l. 18 to p. 6, l. 2.

⁹¹ *Id.*, p. 6, ll. 8-13.

⁹² *Id.*, p. 6, ll. 13-20.

⁹³ *Id.*, p. 6, l. 21 to p. 7, l. 11.

- They reduce or eliminate the possibility of petroleum spills or leaks during fueling, operation, and even when parked;⁹⁴
- They require less maintenance and are cheaper to fuel (85% of charging will occur at home, meaning that at Ameren Missouri's residential rate, charging an EV is equivalent to paying about \$1.12 per gallon for gasoline);⁹⁵
- They allow for more efficient use of the utility's system because they are flexible load that can be charged when demand on the system is low but when there is ample capacity on the system (that all customers must pay for already), a fact which may also help integrate distributed energy resources, including renewables like the wind the Company is investing in.⁹⁶

The Company today has customers, and will have more and more customers in the future, that need sufficient charging infrastructure in place to be able to (a) buy an EV and (b) fully utilize an EV if they already own one. And if that infrastructure is not in place, the Company's customers are going to remain at a significant disadvantage as compared to citizens in other states where the state is stepping up with policy support of the kind the Company is asking the Commission to provide here. Customers in Missouri, like customers in those other states, need to be able to take advantage of the more than 30 EV models General Motors and Ford have committed to and the many other models to come from other manufacturers. As Mr. Wills put it, "we think Missourians are going to be faced with . . . a vehicle purchase market where there's

⁹⁴ *Id.*, p. 8, ll. 6-7

⁹⁵ *Id.*, p. 7, l. 12 to p. 8, l. 2.

⁹⁶ Ex. 6, p. 21, ll. 3-4, p. 56, ll. 11-14; Ex. 7, p. 71, l. 23 to p. 72, l. 4. DED agrees, as evidenced by Ms. Kelley's testimony. See Ex. 300, p. 8, ll. 8-18 (also noting that time-of-use rates are likely not necessary now to capture these benefits).

⁹⁷ Ex. 300 p. 6, ll. 6-10; Ex. 2, p. 22, ll. 6-14 (Mr. Justis pointing to another 28 EV offerings from Daimler, Hyundai, and Toyota in the next two to four years).

a lot more electric options and a lot fewer gasoline. As so . . . I think two things are important because of that. One is that if we don't have charging infrastructure, people [utility customers] are going to have a really limited choice on what vehicles they are going to purchase, [and] secondly, . . . with our program [we can] accelerate [EV adoption] even more."98

It is commonplace for the Commission to talk in terms of whether the public interest is served by approving a given utility initiative or program, and it is equally common for that public interest determination to be an important, if not *the deciding*, factor in the Commission's decision. The Company respectfully submits that its customers' needs – including EV drivers – and other public interest considerations ranging from lower overall energy consumption to reduced pollution, aside from any debate about the cost-effectiveness of investing about \$2.2 million per year for the five years of the EV program, strongly support the conclusion that approval of the EV program is, indeed, in the public interest. As Mr. Wills puts it, "given the broad benefits of EV adoption that Mr. Justis describes, it is in the public interest that we are able to ensure that more and more interested consumers have a practical and secure choice in EVs." The EV program proposed in this docket is a good means to promote that practical and secure choice without taking undue risk.

<u>Issue 1.c.</u> If the [EV] program is approved, what is the appropriate cost recovery mechanism?

The Commission should approve deferral of the program's costs to a regulatory asset as described by Mr. Wills in his direct testimony and, ultimately, should include that regulatory asset balance in the Company's revenue requirement used to set its rates using a seven-year

⁹⁹ Ex. 6, p. 19, ll. 12-14.

⁹⁸ Tr. p. 259, ll. 5-17.

amortization period.¹⁰⁰ While the Company understands that the ultimate decision on including the regulatory asset in the revenue requirement will be reserved for a rate proceeding, the Commission should, in addition to authorizing the deferral, recognize in its order in this case the reasonableness of the approach proposed by the Company. It should do so because the requested accounting and ultimately ratemaking treatment is appropriate for several reasons.

First, as discussed earlier, the program is needed to achieve necessary charging infrastructure to spur more widespread EV adoption over which the Company's fixed costs can be spread. This in turn will result in lower overall rates than would exist without the program, providing benefits to all customers. Second, the program will also meet the changing needs of the Company's customers who own or want to own an EV because such customers need for the appropriate charging infrastructure to be in place so that they can take full advantage of the EVs they own and of the EVs that are expected to proliferate in the car market in the next few years. Third, there are other public interest benefits that the program will deliver, such as reduced emissions, which were outlined in detail above. In short, because all customers will benefit from the programs in these ways, all customers should ultimately bear the cost of the program.¹⁰¹ The Commission should recognize the validity of that principle.

Because of the single-issue ratemaking prohibition in Missouri, however, the only means for all customers to ultimately bear the program costs is to defer those costs to a regulatory asset and to ultimately include that regulatory asset in the Company's revenue requirement as

¹⁰⁰ See generally Ex. 6, pp. 40-54. More specifically, the appropriateness of the seven-year amortization period is addressed starting at p. 51, l. 13 through p. 52, l. 6 of Ex. 6. Mr. Wills also explains (see Ex. 7, p. 57, l. 20 to p. 59, l. 14) why the questions raised by Staff witness Oligschlaeger about rate case timing and the rate case moratorium reflected in S.B. 564 do not materially change his conclusions that a seven-year amortization period is the shortest reasonable period needed to fairly cover financing costs.

¹⁰¹ These needs and benefits were addressed earlier in the brief and, in the specific context of cost recovery, are also addressed in Mr. Wills' direct testimony (Ex. 6) at p. 40, l. 18 to p. 43, l. 21.

described above. Notably, while such regulatory assets are often included in rate base as a means of compensating the utility for the cost of the capital that created the regulatory asset, the Company recognizes that it will benefit between rate cases from the increased electricity sales caused by the program and, consequently, will not ask for rate base treatment of the regulatory asset.¹⁰² Instead, the Company's proposal allows it to retain the positive regulatory lag associated with the increased electric sales between rate cases and allows customers to completely avoid financing costs for the program investments. Not only is this approach a fair one, but it aligns the Company's and its customers' interests. Those interests are aligned because by not seeking rate base treatment of the regulatory asset, the Company has absolutely no incentive to pay program incentives to charging station developers unless the resulting charging stations will in fact spur more widespread EV adoption and in turn produce incremental electricity sales. This is because if incremental electricity sales do not occur, the Company will fail to be compensated for the cost of the capital it is advancing for the program. ¹⁰³ This provides the Company with the incentive to spend the program dollars wisely and to maximize their effectiveness in spurring more widespread EV adoption through the development of needed charging infrastructure.

Use by the Commission of deferral accounting in this manner is a commonly-employed tool, including for new programs. For example, deferral accounting was approved by the Commission in three different ways for elements of the Company's Renewable Choice Program, which was approved by the Commission last summer, and the Commission has approved deferral accounting for energy efficiency program costs (pre-MEEIA) for the Company, Kansas City

¹⁰² Ex. 6, p. 44, l. 14 to p. 46, l. 4. ¹⁰³ *Id.*, p. 45, l. 19 to p. 46, l. 4.

Power & Light Company, and Missouri Gas Energy – deferrals that are exactly analogous to the treatment the Company seeks in this case. As Mr. Wills explained, it is important for the Commission to provide such treatment for new programs because if a new program that is beneficial is proposed without a deferral mechanism in place, it could be financially detrimental for the utility to pursue it, meaning those benefits would be lost. As Mr. Wills also testified, "[t]he Commission should adopt policies to encourage these types of innovative and beneficial programs, not discourage them." 106

In summary, with respect to ultimate cost recovery, the Commission should:

- Authorize the deferral of program costs to a regulatory asset so that the Company
 may request inclusion of an amortization of the deferred sums over a seven-year
 period in its future rate proceedings, but without inclusion of the regulatory asset
 balance in rate base; and
- Acknowledge the reasonableness of such an approach, including the seven-year
 amortization period, given the need for and benefits of the program (both
 financial and public interest benefits) and the avoidance by customers of any
 responsibility for financing costs associated with the Company's program cost
 investments.

<u>Issue 1.d.</u> If the [EV] program is approved, what conditions, if any, should be imposed by the Commission?

There should be no conditions imposed on the Commission's approval of the EV program. The Commission is required to make its decisions based upon the competent and substantial evidence of record and here, its task is to decide whether the Company has proposed

¹⁰⁴ Ex. 7, p. 55, l. 4 to p. 56, l. 3. There are other examples. *Id.*, p. 56, ll. 4-16.

¹⁰⁵ *Id.*, p. 56, ll. 17-21.

¹⁰⁶ *Id.*, p. 56, ll. 20-21.

reasonable, prudent programs, including based upon its consideration of the public interest in approving such programs. If it decides that question in the affirmative, it should approve the programs.

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

For the reasons given and based on the evidence outlined in this brief, the answer to that question is clearly that the Commission should approve the Business Solutions program.

<u>Issue 2.a.</u> Has Ameren Missouri provided evidence that there is a need for the [business] program?

Ameren Missouri has established that there is a need for the Business Solutions program because of the many benefits it will provide to participants and non-participants alike and the environment. The program is a pilot-scale program proposing to spend a relatively modest approximately \$7 million over five years. ¹⁰⁷ It is designed to "test customer acceptance of the program and build the infrastructure necessary" to manage it. ¹⁰⁸ Benefits include reduced electric rates for all customers, ¹⁰⁹ lower emissions, ¹¹⁰ lower total energy consumption and costs across fuels for participants, ¹¹¹ reduced operations and maintenance expenses, ¹¹² and improved

¹⁰⁷ Ex. 4 (Pickles Direct), Sch. DP-D2-31 (\$6.882 million); Tariff Sheet No. 166 (attached to the Company's Application).

¹⁰⁸ *Id.*, p. 17, Îl. 1-2.

¹⁰⁹ The cost-effectiveness (including its rate-lowering impact) of the program will be addressed in more detail in addressing Issue 2.b. 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 (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.

¹¹⁰ Ex. 4, p. 7, ll. 1-19.

¹¹¹ *Id.*, p. 6, ll. 9-12. This is also demonstrated by the modified total resource cost (mTRC) results presented in Mr. Pickles' testimony. *Id.*, p. 8, l. 19 to p. 9, l. 4. ¹¹² *Id.*, p. 5, ll. 20-21.

productivity and safety. 113 The business program also promotes flexible load that can easily charge at different times of the day, which will result in more efficient use of the grid. 114

The need for the program, as evidenced by these kinds of benefits for participants and non-participants alike, is not theoretical. To the contrary, the Business Solutions program was designed based upon an Ameren Missouri-specific study, including cost-effectiveness studies and a study of the market potential for each technology in Ameren Missouri's service territory. Thirteen different technologies were evaluated. After study, seven of those technologies were included in the program. The Ameren Missouri-specific research included interviews with equipment dealers, customers and others with knowledge of the markets for the various technologies in Ameren Missouri's service territory. It also included use of territory-specific data from various sources to determine the potential for inducing adoption of the technologies. The study results indicate that over five years the program can be expected to pay incentives for 2,465 eligible pieces of equipment. Program design was also informed by substantial experience with other beneficial electrification programs operating in other states.

Other utilities and state utility commissions recognize the benefits of such programs and the need for them, as evidenced by Mr. Pickles' citation to 12 different utility programs that provide incentives for adoption by their customers of selected electro-technologies. Some or

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¹¹³ *Id.*, p. 5, ll. 12-13

¹¹⁴ *Id.*, p. 5, l. 7.

¹¹⁵ *Id.*, p. 10, ll. 11-20. The study results are presented in Schedule DP-D2 attached to Ex. 4.

¹¹⁶ Id., p. 11, ll. 1-19. More details on each technology are also provided from pages 11 to 13 of Ex. 4.

¹¹⁷ Tariff Sheet No. 166.1, attached to the Company's Application.

¹¹⁸ *Id.*, p. 17, l. 3 to p. 18, l. 7; Sch. DP-D2-12 to DP-D2-17.

¹¹⁹ *Id*.

¹²⁰ *Id.*, p. 18, ll. 8-11.

¹²¹ *Id.*, p. 17, ll. 11-12 and Sch. DP-D2-8, 9.

¹²² *Id.*, p. 9, 11, 16-18; Ex. 5, p. 7, 1, 19 to p. 8, 1, 3.

all of the costs of at least seven of these programs are included in the utility's revenue requirement upon which customer rates are set.¹²³ The reason programs like this exist is because there are real barriers to getting users to purchase what are typically more expensive pieces of electric equipment (as compared to their ICE-powered counterparts), including unfamiliarity, skepticism and fear relating to performance of an electric piece of equipment versus one powered by an ICE and, given those barriers, the problem of dealers not investing the time and providing the education needed to convince the user to "go electric" because of the dealer's desire for a quick sale.¹²⁴

There are Ameren Missouri-specific indications that these barriers do exist and that there is significant potential for beneficial electrification of these end uses in Ameren Missouri's service territory. There are Ameren Missouri-specific indications that these barriers do exist and that there is significant potential for beneficial electrification of these end uses in Ameren Missouri's service territory. For example, despite a long history of operations, just 11% of the airport ground support equipment operated by airlines at the Lambert-St. Louis International Airport that would be eligible for the program is currently powered by electricity. In addition, more than 90% of truck refrigeration units operating in Ameren Missouri's service territory that would be eligible for incentives are, today, fueled by diesel, and of the overnight truck parking spots available in the service territory, 99% do not have truck stop electrification. And while the current electric share for forklifts is significantly greater than for the other eligible

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¹²³ Ex 5, p. 7, l. 19 to p. 8, l. 3; p. 8, ll. 4-12.

¹²⁴ *Id.*, p. 13, l. 1 to p. 14, l. 10.

¹²⁵ Ex. 4, Sch. DP-D2-14; Tr. p. 164, l. 18-23.

¹²⁶ Ex.4. Sch. DP-D2-13 and DP-D2-15.

technologies, electric forklift market share for forklifts eligible for the program in Ameren Missouri's territory actually declined from 2017 to 2018, standing now at 49.6%. 127

Nor should we expect other funds to eliminate the need for the program. As it did regarding the EV program, Staff suggested that VW trust funds may provide some of the needed incentives. 128 However, the evidence shows that there is considerable uncertainty about those VW trust funds, and shows that even if VW trust funds were to show up over the long, 10-year 129 period when they might be available, much of the equipment those VW funds might be available for is different than the equipment targeted by the Business Solutions program. Regarding the possibility of VW trust fund availability, Staff witness Murray admits that it is possible that all the \$2 million currently allocated in the yet-to-be-approved VW trust mitigation plan for cargo (e.g., forklifts) or airport equipment could be shifted away from that category and into one of the first three categories listed in the VW trust plan (i.e., to school buses, government trucks, or transit and shuttle buses). 130 Regarding the equipment for which VW funds might be available versus equipment covered by the Business Solutions program, Mr. Murray also conceded that there are capacity minimums for the forklifts (they must have a capacity of over 8,000 pounds) that could potentially receive VW trust money (if any VW dollars end up being available at all) but there are no such capacity minimums for the forklifts eligible under the Business Solutions

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¹²⁷ Tr. p. 164, l. 24 to p. 165, l. 6. This is generally in line with national figure from the same source (Industrial Truck Association) showing the share of electric forklifts that are eligible for program incentives has meandered from between 40% and 50% over the past several years (50% in 2009 down to 43% and then back to 50%). Ex. 12.

¹²⁸ Ex. 102 (Murray Rebuttal), p. 3, ll. 11-17.

¹²⁹ Tr. p. 409, 11. 7-9.

¹³⁰ Tr. p. 407, ll. 10-16. One can easily imagine cash-strapped legislators redirecting all the money to fund school buses or other government needs as a mean to cover what would otherwise be general revenue-funded needs.

program.¹³¹ And Mr. Murray further confirmed that a participant could expand its fleet of equipment under the Business Solutions program but that VW funds are not available for expansions.¹³²

In summary, the Business Solutions program can cost-effectively (as discussed below) meet the needs of customers who use this kind of industrial equipment to obtain such equipment when they otherwise would not do so and realize the equipment's benefits, while providing additional benefits, including more efficient utilization of Ameren Missouri's system, reduction of overall energy consumption in the state, and reduction of emissions both at customers' locales and in the service territory.

<u>Issue 2.b.</u> Has Ameren Missouri provided evidence that the [business] program is cost effective?

The evidence in this case convincingly demonstrates that the proposed program is cost effective by several measures. First, the RIM test result for the program is a strong 1.81. This means that for every dollar spent on the program (administrative costs, incentives, etc.), it is expected to deliver \$1.81 of benefits. These benefits will manifest themselves in a positive margin on the incremental electric sales the program will create, allowing the Company to spread its fixed costs over more sales to the benefit of all customers. Second, viewed in the same manner by which the cost-effectiveness of energy efficiency programs is judged (using the TRC, or total resource cost test), the program is also strongly cost-effective, with a very high modified

¹³¹ *Id.*, p. 408, ll. 4-22.

¹³² *Id.*, p. 413, ll. 8-12.

¹³³ Ex. 4, p. 8, ll. 14-18 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 (about \$12.5 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.

TRC of $3.39.^{134}$ The modified TRC captures all the benefits and costs over the equipment's life (such as savings of all fuels) as compared to use of a piece of like equipment powered by an ICE (even accounting for free ridership). And before deciding which measures to include, every measure was screened to see if (given the proposed incentive levels) the measure was cost-effective – *all* of them are. 136

Staff and OPC both agree that if a utility can generate more revenues in a cost-effective manner (i.e., that benefits customers), there is nothing wrong with doing so; that there is no reason the utility would not do so. ¹³⁷ The Company agrees, and indeed, the Company has presented strong evidence, including analysis showing that the Business Solutions program is cost-effective. However, neither Staff nor OPC – despite having many months to do so – have provided any analysis at all that rebuts the Company's cost-effectiveness analysis results. There is simply no reason for the Commission not to approve the Business Solutions program.

<u>Issue 2.c.</u> If the program is approved, what is the appropriate cost recovery mechanism?

The reasons given in response to Issue 1.c earlier regarding cost recovery of the EV program costs also apply to the Business Solutions program. In summary, with respect to ultimate cost recovery of the program's costs, the Commission should,

Authorize the deferral of program costs to a regulatory asset so that the Company
may request inclusion of an amortization of the deferred sums over a seven-year
period in its future rate proceedings, but without inclusion of the regulatory asset
balance in rate base; and

¹³⁴ Ex. 4, p. 8, l. 19 to p. 9, l. 4.

¹³⁵ Ex. 4, p. 14 (Table 1).

¹³⁶ Ex. 10 (showing net benefits for each measure based on each type of cost-effectiveness screening test).

¹³⁷ Tr. p. 362, ll. 10-15 (OPC) and p. 417, ll. 16-21 (Staff).

Acknowledge the reasonableness of such an approach, including the seven-year
amortization period, given the need for and benefits of the program (both
financial and public interest benefits) and the avoidance by customers of any
responsibility for financing costs associated with the Company's program cost
investments.

<u>Issue 2.d.</u> If the program is approved, what conditions, if any, should be imposed by the Commission?

Neither the Staff's nor OPC's prefiled testimony contain a single, concrete suggestion for changes to the Business Solutions program's terms that would improve the program or address the very general concerns (all of which appear to be centered on a worry that unneeded incentives might be paid) upon which their opposition appears to be based. Based upon the evidence adduced in this case during the evidentiary hearing, certain concerns have been made clearer. Given that greater clarity, the Company believes those concerns (regardless of their validity) can and should be addressed. Since the Business Solutions program's terms and conditions appear in the program tariff sheets, the Company suggests the Commission condition its approval of the program on the Company making the tariff sheet changes addressed below. No other conditions should be imposed on the Commission's approval of the business program.

First, regarding the airport ground equipment measures, the intention of the business program was, and remains, to pay incentives to an airline that owns airport ground support equipment (fueled by propane, diesel or gasoline) and that replaces that ground support equipment with an eligible electric piece of equipment. As provided for by the filed Business Solutions program tariff sheets, the purpose is to provide "assistance to customers in making the switch to electric." If it is the airline that owns and operates the equipment, it is the airline

¹³⁸ Sheet No. 166, attached to the Company's application.

that would be making the switch. However, to the extent that an airline may not have the electric service account with Ameren Missouri where the equipment would be charged (e.g., if the airport buys the electricity from Ameren Missouri and, as part of its leases with the airlines, allows airlines to use it), the program tariff should be clarified to ensure that the incentive goes to the entity buying, owning, and operating the eligible piece of equipment. Consequently, the Commission should condition its approval of the business program on the Company adding a definition of "Customer" to the "Availability" section of Sheet No. 166, as follows: "For purposes of the Program, a customer shall be the person, firm, or entity taking electric service from the Company under any of the Service Classifications listed above if such person, firm, or entity is the purchaser, owner, and operator of the eligible measure (a "direct customer"), but if the direct customer is not the purchaser, owner, and operator of the eligible measure, the person, firm, or entity that purchases, owns, and operates the eligible measure and as part of the lease or other arrangements with the direct customer, uses electricity purchased by the direct customer to charge the eligible measure, shall be deemed to be the customer." This clarification will likely only apply to the airport ground equipment measures that are part of the program, but will ensure that an airline making the switch to electric will properly receive the incentive.

Second, to better reflect the Company's intention regarding how the program will be run (as explained by Mr. Pickles both in his surrebuttal testimony and during his hearing testimony), the Commission should condition its approval of the program on two changes to the Program Provisions section of the tariff sheets. The first change would be to codify a requirement that the customer's facility be made available for inspection (at Ameren Missouri's discretion) prior to purchase of the measure and qualification for the incentive, so the Company can, if necessary,

determine eligibility for the incentive. This codification can be accomplished by modifying item "4" under the "Program Provisions" section of Sheet No. 166 to read as follows (addition underlined): "4. Customer must provide a completed program application, model and serial numbers of the installed equipment and equipment invoices or receipts, and must permit the Company or its agent to conduct a pre- and/or post-equipment installation inspection of Customer's facility and/or review other evidence prior to approval of the application. Customers who, in the Company's sole judgment, are deemed likely to have purchased the electric technology in the absence of the incentive offered by the Program shall be ineligible to receive an incentive."

Third and similarly, because the intention of the Business Solutions program was to provide incentives for an expansion of an electric fleet of measures *only* if the customer could demonstrate to the Company's satisfaction that it would have, without the incentive, purchased a gasoline, diesel, or propane-powered measure, ¹⁴⁰ the tariff sheets should also be clarified to make that intention clear by making the following change so that listed item "3" under the "Program Provisions" section of Sheet No. 166 will read as follows (addition underlined): "3. Equipment must be replacing a gasoline, diesel, or propane unit, OR be a new addition, OR be an expansion to an existing fleet if the customer can demonstrate to the Company's satisfaction that the expansion would have otherwise consisted of equipment powered by gasoline, diesel, or propane (electric equipment replacing) and;".

Finally, as Mr. Pickles discusses in his surrebuttal testimony, the Business Solutions program tariff sheets do not reflect a level of flexibility that would make the program more effective, that is, the sheets appear to require that all of a given incentive be paid to the end use

¹⁴⁰ Mr. Pickles addressed this at the hearing. Tr. p. 190, l. 21 to p. 191, l. 15.

¹³⁹ Tr., p. 188, ll. 4-9.

customer and that none of the incentive can be paid to a dealer and that was not the intent of the program. Mr. Pickles recommends that the tariff sheets include a provision that will allow an incentive that would otherwise be paid to the customer to be paid (if needed) to participating equipment dealers or vendors to help offset their costs and to induce them to promote the electric measures in the program. Such a change would, as needed, provide an even better chance of inducing adoption of eligible measures and the delivery of the benefits they provide.

Consequently, the Company requests that along with the other tariff-related conditions it has recommended to the Commission, the Commission should also condition its approval of the Business Solutions program on the inclusion of the following provision after the existing last paragraph of the "Program Provision" section on Sheet No. 166.1: "Notwithstanding the general requirement that incentives be paid to eligible customers, the Company may, if it deems it necessary to increase adoption, pay a portion of an incentive to the dealer or vendor providing the equipment to incent to promote the eligible measures."

<u>Issue 2.e.</u> Should the Commission grant the variances requested by Ameren Missouri?

Yes, under the authority given it in the variance provision of the Promotional Practice rule (4 CSR 240-140.0101(2)), the Commission should grant a variance of 4 CSR 240-14.020(1)(B) and (1)(D) for good cause shown (although the Company questions whether the Commission's intention in adopting the Promotional Practices rule was, as Staff argues, to interfere with a program such as this where at best one could argue some kind of indirect competition with natural gas). 143

¹⁴¹ Ex. 5, p. 14, l. 20 to p. 15, l. 4.

¹⁴² *Id.*, p. 15, ll. 4-10.

¹⁴³ Tr. p. 427, l. 15 to p. 428, l. 14 (Mr. Murray admitting that the competition with which the Staff seems to be concerned is indirect).

At its core, "good cause depends upon the circumstances of the individual case, and a finding of its existence lies largely in the discretion of the officer [here, the Commission] to which the decision is committed." *Wilson v. M.E. Morris*, 369 S.W.2d 402, 407 (Mo. 1963). Similarly, the Missouri Supreme Court has held that good cause is "...a cause or reason sufficient in law; one that is based on equity or justice or that would motivate a reasonable man under all the circumstances." *State v. Davis*, 469 S.W.2d 1, 5 (Mo. 1971). These standards support a finding of good cause here. It is eminently reasonable for the Commission to grant the variance so the need for the program – i.e., the realization of its benefits – can be satisfied. It is also eminently fair and just to grant the variance, especially given the nature and magnitude of its benefits and the exceedingly minor (and at most indirect) competition with natural gas. It is also fair and equitable to grant the variance given that its benefits flow not just to participating customers, but to non-participating customers in the form of lower electric rates and emissions, and to workers who will use or otherwise be near the equipment.

III. <u>CONCLUSION</u>

The Charge Ahead programs – both the EV and Business Solutions programs – provide a thoughtful, prudent, and reasonable means to meet evolving customer needs in a manner that the evidence shows is likely to be cost-effective for all customers, while providing significant environmental benefits and improving the efficient use of the Company's system. These programs reflect policies the Commission should be encouraging its utilities to pursue, and that the Commission should support.

The Commission should approve the EV program without condition, should approve the Business Solutions program on the condition that the tariff changes outlined herein are made,

and should approve deferral of the costs of the programs to a regulatory asset and indicate that an amortization period of seven years would be reasonable.

Respectfully submitted,

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Dated: January 7, 2019

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing response was served on counsel for all parties of record in this docket via e-mail on the 7th day of January, 2019.

/s/ James B. Lowery
James B. Lowery