# STATE OF ILLINOIS ILLINOIS COMMERCE COMMISSOIN

AMEREN ILLINOIS COMPANY D/B/A AMEREN ILLINOIS	) ) )	
PETITION FOR APPROVAL OF BENEFICIAL ELECTRIFICATION PURSUANT TO SECTION 45 OF THE ELECTRIC VEHICLE ACT	)	Docket No. 22-0431/22-0443
	)	

Direct Testimony of Eric Borden and Courtney Lane

On Behalf of The People of the State of Illinois

**AG Exhibit 1.0** 

**September 15, 2022** 

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AG Ex. 1.1: Resume of Eric Borden AG Ex. 1.2: Resume of Courtney Lane

#### 1 I. INTRODUCTION AND QUALIFICATIONS

- 2 Q. Please state your name, title, and employer.
- 3 A. **Mr. Borden:** My name is Eric Borden. I am a Principal Associate at Synapse Energy
- 4 Economics ("Synapse"), located at 485 Massachusetts Avenue, Suite 3, Cambridge, MA
- 5 02139.
- 6 **Ms. Lane:** My name is Courtney Lane. I am a Senior Associate at Synapse Energy
- 7 Economics, located at 485 Massachusetts Avenue, Suite 3, Cambridge, MA 02139.
- 8 Q. Please describe Synapse Energy Economics.
- 9 A. Synapse Energy Economics is a research and consulting firm specializing in electricity and gas industry regulation, planning, and analysis. Our work covers a range of issues, 10 11 including economic and technical assessments of demand-side and supply-side energy 12 resources; energy efficiency policies and programs; integrated resource planning; 13 electricity market modeling and assessment; renewable resource technologies and 14 policies; and climate change strategies. Synapse works for a wide range of clients, 15 including state attorneys general, offices of consumer advocates, trade associations, 16 public utility commissions, environmental advocates, the U.S. Environmental Protection 17 Agency, U.S. Department of Energy ("DOE"), U.S. Department of Justice, the Federal 18 Trade Commission, and the National Association of Regulatory Utility Commissioners.
- Synapse has over 30 professional staff with extensive experience in the electricity
- 20 industry.

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21 Q. Please summarize your professional and educational experience.

22	A.	Mr. Borden: I have over ten years of experience in the energy industry and joined
23		Synapse in 2022. From 2015 to 2022, I was a Senior Energy Expert at the Utility Reform
24		Network ("TURN") in California, where I served as an expert witness in numerous
25		proceedings before the California Public Utilities Commission. I provided in-depth
26		analysis to inform policy recommendations on a variety of energy issues, including
27		several applications and policy-related proceedings related to electric vehicle
28		infrastructure and policy. Prior to my role at TURN, I served as a Senior Energy Analyst
29		at 4Thought Energy, where I conducted financial analyses based on multiple utility tariffs
30		for a distributed generation natural gas combined heat and power firm. I also have
31		previous consulting experience. I have a Bachelor's degree in finance from Washington
32		University in St. Louis and a Master's in Public Affairs from the University of Texas at
33		Austin. My resume is attached as AG Ex. 1.1.
34		Ms. Lane: I have 18 years of experience in energy policy and regulation. At Synapse, I
35		work on issues related to performance-based regulation, grid modernization, benefit-cost
36		analysis, rate and bill impacts, and review of distributed energy resource and electric
37		vehicle utility filings. Prior to working at Synapse, I was employed by National Grid as
38		the Growth Management Lead for New England where I oversaw the development of
39		customer products, services, and business models for Massachusetts and Rhode Island. In
40		previous roles at National Grid, I led the development of Rhode Island Annual and
41		Three-Year Energy Efficiency Plans, led the facilitation of the Rhode Island Energy
42		Efficiency Collaborative, and worked with key stakeholders on the development of
43		policies and strategies to further promote energy efficiency and demand response in the

44		state. Prior to joining National Grid, I worked on regulatory and state policy issues
45		pertaining to energy conservation, retail competition, net metering, and the Alternative
46		Energy Portfolio Standard for Citizens for Pennsylvania's Future. Prior to that, I worked
47		for Northeast Energy Efficiency Partnerships, Inc. where I promoted energy efficiency
48		throughout the Northeast.
49		I have testified before the New Hampshire Public Utilities Commission, the Maryland
50		Public Service Commission, the New Mexico Public Regulation Commission, the
51		Pennsylvania Public Service Commission, the Public Service Commission of the District
52		of Columbia, and the Rhode Island Public Utilities Commission.
53		I hold a Master of Arts in Environmental Policy and Planning from Tufts University and
54		a Bachelor of Arts in Environmental Geography from Colgate University. My resume is
55		attached as AG Ex. 1.2.
56	Q.	On whose behalf are you testifying in this case?
57	A.	We are testifying on behalf of the People of the State of Illinois represented by the Office
58		of the Attorney General ("AG").
59	Q.	What is the purpose of your testimony?
60	A.	The purpose of our testimony is to review and assess the Beneficial Electrification
61		("BE") Plan submitted by Ameren Illinois Company ("Ameren" or the "Company") and
62		to provide recommendations for improvement. We do not address all aspects of the
63		Company's proposal. However, silence on any issue should not be taken as acceptance of
64		the Company's proposals.

55	Q.	What materials did you rely on to develop your testimony?
56	A.	The sources for our testimony and exhibits are the Company's direct testimony and
57		exhibits, public documents, and responses to discovery requests, as well as our personal
58		knowledge and experience.
59	Q.	Were these exhibits prepared by you or under your direction?
70	A.	Yes. Our testimony and the accompanying exhibits were prepared by us or under our
71		direct supervision and control.
72	II.	SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS
73 74	Q.	Please summarize your concerns with the Company's BE Plan in the current form and provide your recommendations to address these concerns.
75	A.	We find several issues should be addressed to ensure Ameren's programs support the
76		transportation electrification goals of the State while being in the best interest of
77		ratepayers. Briefly, our conclusions and recommendations are as follows:
78		At this time, the Commission and stakeholders do not have sufficient information
79		to know whether low-income ("LI") customers will receive proportional benefits
30		to costs that they will pay to support the BE Plans. LI customers should incur a
31		smaller proportion of costs or be excluded from paying for these programs until
32		Ameren can demonstrate that its programs benefit these customers to the same
33		extent as non-LI customers.
34		We understand that ICC Staff ("Staff") recently filed a motion in another BE Plan
35		docket that may implicate the legality of three of Ameren's rebate programs that i
36		proposes to offer in its BE Plan.

87 Ameren's Driver Education program, and its rebate proposal, is inadequately 88 supported given the level of requested budget. This funding to provide rebates 89 would be better spent on electrifying vehicles that have the ability to cover a 90 broader geographic range and serve more customer such as school busses and 91 other forms of public transit. Ameren's proposal to potentially enroll customers beyond expected participation 92 93 levels lacks transparency and does not adequately protect ratepayers from 94 unexplained cost overruns. At minimum, the utility should be required to request 95 Commission authorization and provide an explanation if it expects to spend above 96 its annual forecasted budget. 97 Ameren does not appear to adequately ensure access to funding for LI programs 98 and individuals. We recommend there be no budgetary shifting allowed between 99 LI and non-LI programs. 100 Ameren's Customer Fleet Assessment program does not protect ratepayers from 101 funding entities that lack concrete plans to electrify. We recommend a minimal 102 cost-sharing mechanism of 10 percent to ensure program funds are spent 103 effectively and minimize free ridership in the program. 104 Ameren's assumption in its benefit-cost analyses that 100 percent of program EV 105 adoption is due to its subsidy programs is unrealistic and overstates the benefits of

its programs. A third-party evaluation of free ridership in Ameren's programs

should be implemented to modify future iterations of programs and modeling assumptions.

We support Ameren's Community Engagement and Consultation program
because a grassroots approach to equity issues is the most likely to result in
tangible benefits to LI residents and communities. However, we note that
implementation and ongoing tracking and reporting to Staff will be critical for
program success.

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#### III. REGULATORY CONTEXT

#### Q. What is the regulatory context for Ameren's Plan?

117 A. The Climate and Equitable Jobs Act ("CEJA" or the "Act") establishes a goal of adopting
118 1,000,000 electric vehicles ("EVs") in Illinois by 2030 and requires electric utilities that
119 serve more than 500,000 customers to file a BE Plan with the Commission no later than
120 July 1, 2022 for beneficial electrification programs to support the rapid deployment of
121 EVs and make-ready infrastructure statewide. 
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#### Q. What is considered a beneficial electrification program?

A. CEJA defines beneficial electrification programs as those "that lower carbon dioxide emissions, replace fossil fuel use, create cost savings, improve electric grid operations, reduce increases to peak demand, improve electric usage load shape, and align electric usage with times of renewable generation." The Act further defines these programs to include demand response and optimized charging programs that encourage charging at

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<sup>&</sup>lt;sup>1</sup> 20 ILCS 627/45(a)(1) and (d).

 $<sup>^{2}</sup>$  *Id.* at 627/45(b).

times beneficial to the electric grid; time-of-use and hourly pricing electric rates; and incentives for electrification and associated infrastructure directed to specific sectors such as transit, school buses, fleets, government, and public corridors.<sup>3</sup> The programs should also target population segments of equity investment eligible and/or LI individuals and communities.<sup>4</sup>

#### Q. What are the requirements of the BE Plan?

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- A. The Act states that the BE Plan shall, at a minimum, address the following ten requirements:<sup>5</sup>
  - Make-ready investments to facilitate the rapid deployment of charging equipment throughout the State, facilitate the electrification of public transit and other vehicle fleets in the light-duty, medium-duty, and heavy-duty sectors, and align with Agency-issued rebates for charging equipment;
  - 2. The development and implementation of beneficial electrification programs, including time-of-use rates and their benefit for EV users and for all customers, optimized charging programs to achieve savings identified, and new contracts and compensation for services in those programs, through signals that allow EV charging to respond to local system conditions, manage critical peak periods, serve as a demand response or peak resource, and maximize renewable energy use and integration into the grid;

 $<sup>^{3}</sup>$  *Id.* at 627/45(b)(1-15).

<sup>&</sup>lt;sup>4</sup> *Id.* at 627/45(b)(10).

<sup>&</sup>lt;sup>5</sup> *Id.* at 627/45(d)(i-x).

147	3.	Optional commercial tariffs utilizing alternatives to traditional demand-based rate
148		structures to facilitate charging for light duty, heavy duty, and fleet EVs;
149	4.	Financial and other challenges to EV usage in LI communities, and strategies for
150		overcoming those challenges, particularly in communities and for people for
151		whom car ownership is not an option;
152	5.	Methods of minimizing ratepayer impacts and exempting or minimizing, to the
153		extent possible, LI ratepayers from the costs associated with facilitating the
154		expansion of EV charging;
155	6.	Plans to increase access to Level 3 Public Electric Vehicle Charging
156		Infrastructure to serve vehicles that need quicker charging times and vehicles of
157		persons who have no other access to charging infrastructure, regardless of
158		whether those projects participate in optimized charging programs;
159	7.	Whether to establish charging standards for type of plugs eligible for investment
160		or incentive programs, and if so, what standards;
161	8.	Opportunities for coordination and cohesion with EV and EV charging equipment
162		incentives established by any agency, department, board, or commission of the
163		State, any other unit of government in the State, any national programs, or any
164		unit of the federal government;
165	9.	Ideas for the development of online tools, applications, and data sharing that
166		provide essential information to those charging EVs, and enable an automated

167 charging response to price signals, emission signals, real-time renewable 168 generation production, and other Commission-approved or customer-desired 169 indicators of beneficial charging times; and 170 10. Customer education, outreach, and incentive programs that increase awareness of 171 the programs and the benefits of transportation electrification, including direct 172 outreach to eligible communities. 173 IV. AMEREN'S BENEFICIAL ELECTRIFICATION PLAN 174 **Summary of Ameren's Beneficial Electrification Plan** 175 Please summarize Ameren's BE Plan. Q. 176 Ameren's BE Plan builds off its existing Commission-approved and recently enacted A. 177 tariffs and programs, such as Rider EVCP – Optional Electric Vehicle Charging Program 178 ("Rider EVCP"), which the Commission approved in ICC Docket No. 20-0710. Rider 179 EVCP is available to Ameren's delivery customers and implements and administers 180 optional EV charging programs. Rider EVCP currently contains six charging programs. These programs are: Residential, Multifamily Facility, Education Facility, Transit 181 Facility, Corridor Facility, and Non-Corridor Facility. The main thrust of Ameren's BE 182 183 Plan is altering Rider EVCP in ways that the Company believes satisfies the requirements 184 of the Act. 185 Q. What modification to existing tariffs and programs does Ameren propose?

<sup>6</sup> Ameren Ex. 1.0 at 7:110–123.

186 The Company proposes several modifications to Rider EVCP to meet the requirements of A. 187 Act. For example, Ameren creates a series of rebates not formerly contained in Rider 188 EVCP. The Company proposes to include an EV charger and wiring rebate in its 189 Residential, Education Facility, and Transit Facility programs. Under these revisions, 190 residential customers taking service under Rider EVCP who are equity investment 191 eligible and/or LI would be allowed to claim a rebate of 50 percent, up to a maximum of \$1,500, to cover the costs of installing a Level 2 charger at the customer's premises. For 192 193 participating education facilities and transit facilities, they would be allowed a \$5,000 194 rebate for the costs of installing a Level 2 or Level 3 charger if the facility was located in an equity investment eligible and/or LI community.8 195 196

In addition, Rider EVCP lifts the cap on existing programs. As of now, all the charging programs, except for Residential, have a participant cap that limits the number of enrollees in the programs. Ameren proposes to permanently dispose of the current participation limits but does not discuss in detail how it would manage costs if participation outstrips projections.

#### Q. How many customers are currently enrolled in Rider EVCP?

A. The Company reports that as of July 18, 2022, there were 1,217 customers enrolled in the Residential program. According to the Company, this represents 19 percent of the estimated 6,369 light duty EVs in the Ameren service territory. For non-residential customers, Ameren reports that, as of July 18, 2022, none have opted into the

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<sup>&</sup>lt;sup>7</sup> Ameren Ex. 2.0 at 19:417–421.

<sup>&</sup>lt;sup>8</sup> *Id.* at 21:446–449.

<sup>&</sup>lt;sup>9</sup> Ameren response to AG 3.01(b).

206 Multifamily Facility, Non-Corridor Facility, Education Facility, or Transit Facility 207 programs, and one customer opted into the Corridor Facility program. 10 208 Q. Does the Company propose any new programs? 209 Yes. Ameren proposes several new programs for Rider EVCP targeted at multifamily, A. 210 education, transit, private fleet, local government, and LI customers. 211 For the multifamily sector, Ameren proposes an Affordable Mobility Program that would 212 leverage DOE grant assistance to provide two affordable housing facilities with four EVs 213 and four chargers. 11 214 Specific to the education sector, Ameren proposes a Driver Education program to provide 215 high schools with education material and rebates for the purchase of EVs and charging 216 equipment.<sup>12</sup> 217 Within the local government sector, the Company proposes a Community Engagement 218 and Consultation program to assist communities with their EV/charging development 219 strategies and, in equity investment eligible and/or LI communities, provide financial 220 assistance towards executing those strategies.<sup>13</sup> 221 The Company also proposes a Customer Fleet Assessment program for education, transit, 222 and private fleet facilities to assist operators with an economic assessment of fleet

<sup>&</sup>lt;sup>10</sup> Ameren response to JHM 1.01(a).

<sup>&</sup>lt;sup>11</sup> Ameren Ex. 2.0 at 28:609–29:624.

<sup>&</sup>lt;sup>12</sup> *Id.* at 27:582–28:595.

<sup>&</sup>lt;sup>13</sup> *Id.* at 26:559–27:581.

electrification and a Trade Ally program to provide customers across various programs
with a vetted list of qualified electrification experts.<sup>14</sup>

#### 225 Q. Please summarize Ameren's proposed budget for this portfolio of programs.

A. Table 1 below summarizes the Company's proposed annual electric budget and the fouryear total.

Table 1. Ameren BE Plan Program List and Budget

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	Total Electric Budget				
Program	2021	2022	2023	2024	4 Year Total
Multi-Family Facility Program	\$0	\$182,425	\$371,380	\$1,133,555	\$1,687,359
Residential Rebate Program	\$312,715	\$512,075	\$759,357	\$1,440,082	\$3,024,228
Corridor Charging Facility Program	\$32,339	\$92,787	\$161,517	\$184,970	\$471,613
Non-Corridor Charging DC Fast Charging Facility Program	\$32,339	\$60,010	\$127,067	\$184,970	\$404,385
Affordable Mobility Program	\$0	\$0	\$35,000	\$15,000	\$50,000
Community Engagement & Consultation Program	\$0	\$30,000	\$250,000	\$1,075,000	\$1,355,000
Residential Subtotal	\$377,393	\$877,296	\$1,704,321	\$4,033,576	\$6,992,586
Education Facility Program	\$0	\$0	\$129,930	\$507,157	\$637,087
Transit Facility Program	\$0	\$0	\$65,847	\$163,072	\$228,919
Private Fleet Facility Program	\$0	\$0	\$54,883	\$421,948	\$476,831
Local Government Facility Program	\$0	\$0	\$107,344	\$582,945	\$690,289
Fleet Assessment Program	\$0	\$43,100	\$120,000	\$120,000	\$283,100
Non-Residential Subtotal	\$0	\$43,100	\$478,004	\$1,795,122	\$2,316,227
Trade Ally Program	\$0	\$0	\$385,000	\$385,000	\$770,000
Drivers Education Program	\$0	\$0	\$53,837	\$273,039	\$326,876
Other Subtotal	\$0	\$0	\$438,837	\$658,039	\$1,096,876
Portfolio Costs	\$1,412,500	\$650,000	\$2,500,000	\$1,750,000	\$6,312,500
Total Portfolio	\$1,789,893	\$1,570,396	\$5,121,162	\$8,236,737	\$16,718,188

229 Source: Ameren Ex. 4.0 – Cottrell\_Workpaper (Benefit-Cost Analysis)\_Corrected. Tab BE Plan Tables. 15

#### 230 Q. What is the rate impact of Ameren's BE Plan?

<sup>&</sup>lt;sup>14</sup> *Id.* at 25:538–26:558, 28:596–608.

<sup>&</sup>lt;sup>15</sup> This figure includes bill and delivery credits, the inclusion of which is not counted in Ameren's rate impact analysis because these credits are provided to consumers as discounts on their bills.

A. Ameren calculates the rate impact as around 0.3 percent and 0.5 percent of the delivery services revenue requirement over the program period.

	2023	2024
Delivery Services Revenue		
Requirement	\$1,010,482,945	\$1,010,482,945
BE Plan		
Line Extensions	\$52,478	\$175,911
Digital	\$334,274	\$382,215
O&M	\$2,585,000	\$4,567,169
Total	\$2,971,752	\$5,125,295
Percent Impact of Delivery Rev Req	0.29%	0.51%

Source: Ameren Ex. 2.1 at 19.

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However, Ameren notes that comparing its program benefits to costs in the first year (2023) "demonstrates upward pressure on customer rates [...] due to high initial costs of establishing programs, but in the long term there is expected to be downward pressure on customer rates as programs benefits from later years are accrued." As described below, these benefits are overstated due to free ridership, which Ameren has not accounted for. In addition, Ameren does not incorporate any future BE Plan costs in its analysis. At minimum, this means customer protections must be adopted, including budget caps, as discussed below.

#### V. RECOMMENDED MODIFICATIONS TO BE PLAN

- 244 Q. Are you proposing modifications to Ameren's BE Plan?
- 245 A. Yes. Based on our review of Ameren's proposed BE Plan we propose several

  246 modifications. These include the creation of customer protections related to limiting

<sup>&</sup>lt;sup>16</sup> Ameren Ex. 4.0 at 14:257–60.

247 unapproved budget increases and transfers between programs and recommended 248 improvements to specific program offerings. 249 Low-income Customers May Not Receive Adequate Benefits to Justify Costs 250 Q. Does the Company's BE Plan minimize impacts on LI customers as called for in the 251 statute? 252 A. The Company does not treat LI customers differently than other customers for purposes 253 of cost allocation.<sup>17</sup> Is this adequate? 254 Q. At this time, the Commission and stakeholders do not have sufficient information to 255 A. 256 know whether LI customers will receive proportional benefits to costs. Therefore, LI 257 customers should incur a smaller proportion of costs or be excluded from paying for these 258 programs until Ameren can demonstrate that its programs benefit these customers to the 259 same extent as non-LI customers. 260 **Rebates – Statutory Limitations & Policy Concerns** Do you have any concerns with Ameren's new rebates? 261 Q. We understand that Staff recently filed a motion in ICC Docket Nos. 22-0432 & 22-0442 262 A. (Consol.) that asserted that Commonwealth Edison Company ("ComEd") cannot offer 263 264 rebates in its BE Plan for passenger EVs or to public and private organizations and 265 companies that install and maintain EV charging infrastructure because the Illinois

<sup>&</sup>lt;sup>17</sup> Ameren response to AG 2.01.

While we are not lawyers, based on the interpretation set forth by Staff, three of Ameren's rebate program may also violate the Act. These programs are rebates to participating education facilities and transit facilities for installation of Level 2 or Level 3 chargers, and rebates to purchase passenger EVs pursuant to its Driver Education program. To the extent that these programs may be unlawful, we understand those legal

the Illinois Environmental Protection Agency.

issues will be discussed in briefing.

General Assembly granted the authority to administer these specific types of rebates to

## Q. Aside from the legal issues, do you have any concerns with any of the rebates implicated by Staff's motion?

A. Ameren's Driver Education program has a higher percent of the proposed total budget (2.5 percent) compared to the proposed spend figures for the Transit Facility (0.5 percent), Corridor Facility (1.5 percent), LI spend in the Non-Corridor Facility (0.9 percent), Private Fleet Facility (1.6 percent), and Local Government Facility (2.0 percent) programs, yet may impact a smaller portion of Ameren's customers. While we support EV education as part of driver education curriculum, this can occur without driving an EV and does not necessitate rebates for new vehicles. Further, Ameren does not demonstrate that the proposed cost of offering a rebate for an EV that will be solely used for driver education will be justified when other Ameren programs will help to enable the electrification of school buses, public transit, or other means of transportation that may reach a larger portion of the population and have a greater effect on air quality.

<sup>&</sup>lt;sup>18</sup> Ameren response to JP 2.04 Attachment.

Within its BE Plan, Ameren proposed to spend \$150,000 on vehicle rebates for driver education programs in 2024. <sup>19</sup> This is less than the proposed planned budget for the Transit Facility program and close to the LI rebate budget for the Education Facility program in 2024. More impact could be achieved if the vehicle rebates were used to increase funding to promote school bus and Transit Facility electrification.

#### Q. What is your recommendation?

A. We recommend that the Commission reject Ameren's proposal to provide vehicle rebates and only approve the portion of the Driver Education program pertaining to the support of in-classroom education.

#### Rebates - Prudency of Rebates for Residential Charging

#### Q. Do you have any others concerns with Ameren's new rebates?

A. Yes. We have concerns regarding the prudency of offering residential customers a rebate to cover the costs of installing a Level 2 charger.

The Company has not justified the need for these rebates. It has not identified how many equity investment eligible or LI customers own an EV and therefore would benefit from this offering and has not conducted any analysis to determine if the upfront cost of Level 2 charging is the main barrier preventing LI customers from purchasing an EV.<sup>20</sup> Furthermore, Ameren has not conducted any outreach to determine whether LI customers are interested in, or willing to pay, for the cost of a Level 2 charger and does not address the fact that electrical upgrade costs can increase the total cost of installation to upwards

<sup>&</sup>lt;sup>19</sup> *Id*.

<sup>&</sup>lt;sup>20</sup> Ameren response to AG 3.02(a)–(d).

of \$4,500.<sup>21</sup> While Level 1 is the slowest method of charging, it is sufficient for drivers 307 308 who charge overnight and travel 30-40 miles per day and Ameren has not indicated otherwise within its testimony. <sup>22</sup> Thus, the Company's proposal to offer residential 309 310 customers up to \$1,500 to install Level 2 chargers is inappropriate. 311 **Customer Protections – Participation Limits** Does Ameren include participation caps as part of its proposals to protect customers 312 Q. from cost overruns? 313 314 No. While the Company's plan assumes a forecasted level of participation, and associated A. 315 annual budgets, there does not appear to be a participation cap for any of the programs. In 316 cases where an existing program has a participation cap, Ameren's proposal is to remove it.<sup>23</sup> The Company would reconcile additional spending over its forecast on a yearly 317 basis.<sup>24</sup> 318 319 What is Ameren's rationale for removing participation caps? Q. 320 Ameren states that the removal of program limits will "reduce barriers of EV adoption" A. 321 by ensuring ratepayer funds are available when and if needed by prospective sites. It 322 maintains that this allows for entities to plan well into the future with the certainty that 323 program funding will be available when they wish to enroll. The Company also discusses 324 the benefit of ensuring EVs charge at beneficial times through enrollment in its rate designs.<sup>25</sup> 325

<sup>&</sup>lt;sup>21</sup> Kelley Blue Book. An EV Charger Buying Guide: See All Your Options. Available at: https://www.kbb.com/caradvice/ev-charger-buying-guide/. Accessed on 9/14/22.

<sup>&</sup>lt;sup>22</sup> Drive Clean CA. Available at: https://driveclean.ca.gov/electric-car-charging. Accessed on 9/14/22.

<sup>&</sup>lt;sup>23</sup> Ameren Ex. 2.1 at 34.

<sup>&</sup>lt;sup>24</sup> Ameren Ex. 3.0 at 12:239–244.

<sup>&</sup>lt;sup>25</sup> Ameren Ex. 2.0 at 20:439–443.

#### O. Does Ameren propose any cap on program spending?

A. Based on our review of the BE Plan and discovery responses, there does not appear to be a spending cap. However, it is our understanding that the Company does not intend to spend above the annual statutory limit of 1 percent of the delivery services revenue requirement, or \$10.1 million as of the latest Commission approved revenue requirement according to the Company. This \$10.1 million limit is much larger than the Company's annual average budget of \$4.2 million. The service of the delivery services revenue requirement according to the Company.

#### Q. Please explain your concerns with the elimination of program participation caps.

Ameren's proposed budget before the Commission includes cost-benefit analyses assuming average annual spending of \$4.2 million, <sup>28</sup> less than half the statutory cap of \$10.1 million. If participation is greater than anticipated, it appears the Company could spend up to the statutory cap without any requirement to request permission from the Commission, which could substantially alter the program from what is presented in Ameren's BE plan. Within its BE Plan, the Company only provides financial and cost-effectiveness analyses based on expected enrollment in the program, not expenditures above, and up to, the statutory cap. Thus, a process is needed to ensure any additional spending is reasonable and necessary to achieve program goals.

## Q. What is your recommendation to improve customer protections related to the removal of participation caps?

<sup>&</sup>lt;sup>26</sup> Ameren Ex. 3.0 at 13:268–271. If the Company seeks to spend above the statutory limit if participation levels are exceeded, it should make this clear in rebuttal testimony.

<sup>&</sup>lt;sup>27</sup> Includes bill and delivery credits, averaged over 4 years. Ameren Ex. 4.0 "Cottrell\_Workpaper (Benefit-Cost Analysis) Corrected, tab "BE Plan Tables," Table 4.

<sup>&</sup>lt;sup>28</sup> This figure includes bill and delivery credits. Ameren Ex. 4.0 "Cottrell\_Workpaper (Benefit-Cost Analysis)\_Corrected, tab "BE Plan Tables," Table 4.

345 We appreciate Ameren's proposal to encourage greater participation in its BE Plan A. 346 offerings. However, it is important that the Company demonstrate prudent management of its authorized budget and not be permitted to increase spending up to the statutory cap 347 without Commission review. 348 349 For this reason, we recommend that Ameren's proposal not to incorporate participation 350 and budgetary program limits be denied. Instead, Ameren should be required to notify the 351 Commission and other parties to this proceeding if it anticipates exceeding its proposed annual BE Plan budget.<sup>29</sup> If during a given program year, Ameren anticipates spending 352 353 more than its proposed annual budget, it must file a request to the Commission for 354 approval. Any such request should include the expected expenditures and rationale for 355 increased expenditures, a description and analysis of program implementation to-date, 356 and an updated cost-effectiveness analysis. 357 **Customer Protections – Individual Program Budgets** 358 Q. What is Ameren's proposal as it relates to shifting program funds between Low 359 **Income and non-Low-Income sub-programs?** 360 This is unclear. However, discovery responses indicate that Ameren seeks flexibility to A.

 $^{29}$  As presented in Ameren Ex 4.0 – Cottrell\_Workpaper (Benefit-Cost Analysis), Tab "BE Plan Tables," Table 4. The totals for the years are: 2022 - \$1,570,396,2023 - \$5,121,162, and 2024 - \$8,236,737.

shift funding between various programs, up to the annual cap imposed by the Act.<sup>30</sup>

Depending on demand for the program by income, this means non-LI customers could

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<sup>&</sup>lt;sup>30</sup> Ameren response to CNS 1.01. The Company states "There is no limit to the number of Multifamily Facilities outside of low-income or moderate-income areas that can participate in the Multifamily Facility charging program. Likewise, there is no limit to the number of Multifamily Facilities inside of low-income or moderate-income areas that can participate." Given that Ameren cannot spend above the statutory cap, program funds may therefore be exhausted by the non-LI segment.

potentially receive all available funds in a given program year to the detriment of LI participants.

## 365 Q. Is it reasonable to allow the Company complete program flexibility, as it relates to LI and non-LI participation and funding?

A. No. LI customers and communities face the largest barriers to EV adoption. Incremental EV adoption is crucial to program impact and the State's success in achieving widespread electrification goals. These LI customers are also much less likely to be free riders, which increases the efficacy and cost-effectiveness of ratepayer subsidies. Further, the Act specifically states utility programs should enable "low-income and environmental justice communities" to access EV ownership and "support at least a 40% investment of makeready infrastructure incentives to facilitate the rapid deployment of charging equipment in or serving environmental justice, low-income, and eligible communities." The Commission must ensure these provisions are met when programs are implemented.

#### Q. What is your recommendation?

377 A. The Commission should not permit shifting of program budgets between LI and non-LI
378 subprograms to ensure statutory and programmatic goals are achieved. If extenuating
379 circumstances are encountered by Ameren, the Commission should allow an annual
380 process to enable the Company to request a certain percentage of budget shifting up to 25
381 percent from the pre-approved amount, the threshold proposed by ComEd in its BE Plan

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<sup>&</sup>lt;sup>31</sup> 20 ILCS 627/45(a)(7).

 $<sup>^{32}</sup>$  *Id.* at 627/45(d)(3).

382 filed in ICC Docket Nos. 22-0432 & 22-0442 (Consol.) (though only for informational 383 purposes).<sup>33</sup> 384 **Modifications to the Customer Fleet Assessment Program** 385 Q. Please describe Ameren's proposed Customer Fleet Assessment program. 386 Ameren is proposing to provide fleet assessments to education, transit, and private fleet A. 387 facilities at no upfront cost. The purpose of the fleet assessment is to provide fleet 388 managers with the tools and information needed to determine if there is a business case to 389 pursue vehicle electrification. This includes analyzing the customers' existing fleet, 390 identifying potential EV equivalent vehicles and infrastructure needs, cost of ownership, and potential emissions reductions.<sup>34</sup> 391 392 Q. What are your concerns with this proposal? A. 393 Our main concern with this program is the lack of any cost-sharing requirements for 394 private fleet facilities. There are no provisions with the proposed program that would 395 ensure ratepayer dollars are not spent on fleet operators that are not committed to moving 396 forward with electrification. This is of particular importance for private fleets where 397 ratepayers are providing subsidies to private corporations. 398 What is your recommended modification to this program? Q. 399 We recommend a cost-share requirement of 10 percent of the cost of the fleet assessment 400 for private fleets. Under this proposal, the customer would pay 10 percent of the fleet

<sup>&</sup>lt;sup>33</sup> Commonwealth Edison Co., Petition for Approval of Beneficial Electrification Plan under the Electric Vehicle Act, 20 ILCS 627/45 and New EV Charging Delivery Classes under the Public Utilities Act, Article IX & Investigation into Commonwealth Edison Company Beneficial Electrification Plan Filing pursuant to 20 ILCS 627/45, ICC Docket Nos. 22-0432 & 22-0442 (Consol.), ComEd Ex. 1.01 at 33 (July 1, 2022).

<sup>34</sup> Ameren Ex. 2.0 at 25:538–26:558.

401 assessment cost upfront and would be refunded only if they choose to move forward with 402 fleet electrification within 12 months. A similar approach was recently proposed by 403 Baltimore Gas and Electric Company, Potomac Electric Power Company, and Delmarva 404 Power and Light Company as part of their EV program portfolios in Maryland.<sup>35</sup> 405 This approach is beneficial in two ways. First it helps deter customers that are not serious 406 about electrification. Second, it creates an incentive for the customer to move forward 407 with electrifying their fleets. This will help to ensure that ratepayer dollars are spent in a 408 manner that results in the actual electrification of fleets. 409 Q. Do you have other recommendations related to fleet electrification? 410 A. Yes. Many utilities across the country have developed online fleet calculator websites that provide fleet operators with initial education and cost estimates on electrification.<sup>36</sup> 411 412 These tools allow fleet operators to learn about the available EVs in the market and 413 required charging infrastructure. The online tools also allow for fleet operators to enter 414 basic information to determine an estimated total cost of ownership over the life of the 415 EVs. This tool can provide initial information to fleet operators to determine if moving 416 forward with a full fleet assessment makes sense for their operation. VI. AMEREN'S BENEFIT-COST ANALYSIS OVERSTATES THE BENEFITS OF 417 **ITS PLAN** 418

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Q.

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Did Ameren conduct a cost-benefit analysis of its proposed program?

<sup>&</sup>lt;sup>35</sup> PC44 Fleet Subgroup Summary Report. June 30, 2022. Case No. 9478 (ML# 241277).

<sup>&</sup>lt;sup>36</sup> Examples include Pacific Gas and Electric Company, Duke Energy, Southern California Edison, and Potomac Electric Power Company.

120	A.	Yes. Ameren conducted a Total Resource Cost ("TRC") test and Ratepayer Impact
421		Measure ("RIM") test for its proposed program. <sup>37</sup>
122	Q.	Do you have any concerns about Ameren's cost-benefit analysis?
123	A.	Yes. While we did not do an in-depth analysis of all of Ameren's modelling assumptions
124		we note that the Company assumes that 100 percent of EV adoption by program
425		participants is due to its programs. Put another way, many participants in Ameren's
126		program would have bought or leased their EV without the additional subsidy offered by
127		Ameren, so in those cases it would be incorrect to attribute the benefits of the EV to the
428		utility program. As described below, this is an unrealistic assumption.
129	Q.	Is this assumption a large driver of estimated program benefits?
430	A.	Yes. EV adoption drives almost all program benefits for both the TRC and RIM tests.
431		This assumption is thus a significant driver of BCA results.
432	Q.	Are there any program benefits not driven by incremental EV adoption?
133	A.	The only benefit not driven by EV adoption is avoided capacity and T&D benefits due to
134		greater off-peak charging encouraged by Ameren's rate designs. This benefit is less than
135		\$169,000 through 2050 compared to total RIM test benefits of around \$129 million. <sup>38</sup>
436 437	Q.	Is it a realistic assumption that all program participants will adopt an EV due to Ameren's programs?
138		No. This relates to the existence of free ridership. Free ridership entails participants that
139		would have adopted an EV or invested in charging infrastructure even without the

 <sup>&</sup>lt;sup>37</sup> See Ameren Ex. 4.0. The workpapers also provide results for a Participant Cost Test.
 <sup>38</sup> Ameren Ex. 4.0 – Cottrell\_Workpaper (Benefit-Cost Anaysis)\_Corrected. Tabs "Analysis" and BE Plan Tables. Sum of all values for "Decreased Generation Capacity Cost + T&D."

existence of the program or incentive. The impact of free ridership is commonly studied 440 441 as part of energy efficiency evaluations. Utility energy efficiency programs undergo independent third-party evaluations to determine net-to-gross ("NTG") ratios that 442 443 measure the portion of participation that would not have occurred but for the programs. 444 This ratio is applied to energy savings to determine what portion of those savings can be directly attributable to the utility program, often referred to as net savings.<sup>39</sup> Like 445 customer adoption of energy efficiency measures, EV adoption is driven by a number of 446 447 factors beyond the presence of charging stations or vehicle subsidies, including 448 individual's environmental consciousness, saving money on ongoing fuel costs, vehicle performance, vehicle availability, and technology considerations. 40 449 450 Q. Are you aware of an estimate for the percentage of EV adoption benefits that can reasonably be attributed to utility incentive programs? 451 452 No. While we are certain that a more accurate estimate is likely much less than 100 A. 453 percent, we are not aware of a robust study to estimate free ridership related to utility 454 incentives for EV infrastructure. That said, a study of free ridership rates for a 455 Massachusetts vehicle rebate program found that, on average, around 50 percent of participants were free riders. 41 456 Do you believe that Ameren's programs should be rejected due to this significant 457 Q. program and modeling uncertainty? 458

<sup>&</sup>lt;sup>39</sup> National Renewable Laboratory ("NREL"). 2014. *The Uniform Methods Project: Methods for Determining Energy Efficiency Savings for Specific Measure. Chapter 17. Estimating Net Savings: Common Practices.*<sup>40</sup> NREL, Mark Singer, *Consumer Views on Plug-in Electric Vehicles*, January 2016, p. 15.

<sup>&</sup>lt;sup>41</sup> Massachusetts Department of Energy Resources, *Massachusetts Offers Rebates for Electric Vehicles (MOR-EV) Cost-effectiveness Study; 2014-2020 Results Summary*, 2/25/22, p. 17.

459 Given that this is the Company's first BE Plan pursuant to the Act, no. However, the A. 460 Company's unrealistic assumption points to the importance of evaluating free ridership 461 and other related issues like incremental emissions reductions due to the program during 462 and after program implementation so that utility cost-benefit models can incorporate 463 more reasonable assumptions and programs can be modified to minimize free ridership. 464 At the same time, the uncertainty in program effectiveness is a reason for the Commission to approach utility EV programs with some level of caution, including 465 466 through requiring spending thresholds and limitations as we discuss above. VII. COMMUNITY ENGAGEMENT AND CONSULTATION PROGRAM 467 SHOULD BE SUPPORTED 468 469 What is Ameren's proposal for a Community Engagement and Consultation Q. 470 program? The Company proposes \$1.4 million in total funding to "directly assist communities with 471 A. 472 their EV/charging development strategies and, in equity investment eligible and/or LI communities, provide financial assistance toward executing those strategies."42 473 474 Q. Do you believe a grassroots approach to solving equity issues is appropriate and in the interest of ratepayers? 475 Yes, we do. The needs and problems of specific areas are inherently local, and each 476 A. 477 community deserves more than just top-down approaches to ensure equitable distribution 478 of benefits. For example, communities where car ownership is low will not be able to capitalize on subsidies for new EV purchases. 43 We have analyzed geographical 479 480 approaches to utility programs in California and found they have largely failed to produce

<sup>&</sup>lt;sup>42</sup> Ameren Ex. 2.1 at 12, 22.

<sup>&</sup>lt;sup>43</sup> This is acknowledged by Ameren in its response to BTK 1.01 and 1.02 as an element of this program.

tangible outcomes for LI ratepayers and at times have been *inequitable*. For example, despite years of utility subsidy programs with large set-asides for "disadvantaged communities," pilot data from Pacific Gas and Electric's service territory indicated "most geographical designations are simply not granular enough to capture site-level characteristics, and there may be some selection bias for the types of entities willing or able to apply for EV charging subsidies." For example, several multi-billion dollar corporations received higher subsidies simply for being located in a "disadvantaged community." The intention of the Act to carve out investment in LI and underserved communities must be met both by geographical-based subsidy programs, as called for by the statute, *and* intentional efforts to work with communities using a more granular assessment of needs to assure that program benefits assist people who would not have utilized EVs in the absence of the program.

## Q. How can the Commission ensure that ratepayer funded programs ensure "equity" as defined in the statute?

A. Program implementation, along with Commission oversight, are critical areas of focus to promote equity. Ameren must engage in open and consistent dialogue with community groups to understand needs and implement solutions within budget constraints. There will also likely be instances where the Company's EV funding programs cannot solve the particular transportation issues of a community, in which case ratepayer funding would be inappropriate.

<sup>&</sup>lt;sup>44</sup> A.21-10-010, Testimony of Eric Borden Addressing Pacific Gas and Electric's Electric Vehicle Charge 2 Proposal, 7/12/22, p. 18.

#### Q. What are your recommendations for ensuring a successful program?

A. Ameren should provide additional and ongoing detail to the Commission about program implementation, including outreach to community-based organizations. This includes updates regarding outreach, community organizations that have been met with and engaged, and the outcomes of stakeholder meetings. This can be implemented through consistent program reporting, regular workshops with potential LI program participants, and ongoing participation and independent evaluation by Staff or another third-party evaluator.

#### VIII. REPORTING AND EVALUATION IMPROVEMENTS

- Q. How does Ameren propose to provide information about the implementation of its BE Plan?
- 512 A. The Company indicates that it will submit a report to the Commission and the General 513 Assembly by July 1, 2024, and every year thereafter. This report will include a summary 514 of anonymized demographic and geographic data for all individuals and businesses 515 awarded subsidies related to the BE Plan to assure equitable distribution of benefits. It 516 will also include information related to how hiring, contracting, and job training enhance vendor and employee diversity. 46 In addition to this annual report, the Company states 517 518 that it intends to file a report every three years that coincides with the required updates to the BE Plan.<sup>47</sup> This report must include detailed descriptions of transportation 519 520 investments made during the prior plan period, along with investments planned for the 521 following 24 months.<sup>48</sup>

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<sup>&</sup>lt;sup>46</sup> Ameren Ex. 2.1 at 32.

<sup>&</sup>lt;sup>47</sup> Ameren Ex. 1.0 at 20:406–21:432.

<sup>&</sup>lt;sup>48</sup> 20 ILCS 627/45(f).

Does Ameren propose to continue providing its Rider EVCP annual report included 522 Q. 523 in the tariff?

No. The Company proposes to strike the reporting requirement from its Rider EVCP A. tariff. Ameren indicates that due to the fact Rider EVCP is an integral part of the BE 525 526 Plan, it believes that the annual report required under the tariff should be replaced by the BE Plan update filing which will occur on July 1, 2024, and every three years thereafter.49 528

#### Do you find Ameren's proposed reporting to be adequate? 0.

530 A. No, we do not. While Ameren plans to comply with the data collection and reporting 531 requirements of the Act in relation to its collection of demographic and geographic data 532 for plan participants and vendor and employee diversity, more should be done to increase 533 transparency and track the investments and resulting benefits of the BE Plan. As 534 proposed by Ameren, there will be insufficient transparency and data collection to 535 determine if the Company's plans are achieving the goals set forth in the Act. 536 Currently, Rider EVCP requires the Company to provide a summary of the 537 implementation, operation, and administration of the provisions of the rider during the 538 previous calendar year. The report must include the number of, and type of, customers 539 served; the total delivered energy of customers served by program type, broken down by 540 charging periods; the estimated number of EVs supported by the program by program 541 type; the total supplemental line extension credit provided to customers; customer 542 education expenses summarized by tactic and in total; copies of customer education

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<sup>&</sup>lt;sup>49</sup> Ameren Ex. 2.1 at 32.

marketing materials; and findings from Ameren's evaluation/benchmarking of its customer education and outreach efforts.<sup>50</sup> Rider EVCP also states that Ameren must provide in its 2025 report findings from an independent evaluation of the overall program including an analysis that demonstrates whether Ameren's incremental revenue will offset estimated costs.<sup>51</sup>

Reducing reporting of these critical implementation benchmarks from every year to every three years substantially reduces transparency and will prevent the Commission and stakeholders from monitoring the effectiveness of Ameren's plan while it is being executed. This is especially important in the first few years of the BE Plans when adjustments may be appropriate. It is also not clear when the Company will report and track its progress in achieving the other purported benefits of its BE Plan related to reduced air emissions and off-peak EV charging.

### Q. What is your recommendation to improve Ameren's BE Plan reporting?

A. We recommend that Ameren be required to continue its annual reporting requirements listed in Rider EVCP and include incremental revenue generated by the programs broken out by program. In addition, the annual report should track additional metrics. The metrics should include, at a minimum, the following for customers enrolled in Real Time Pricing, Power Smart Pricing, Rider EVCP, and other tariffs and programs that promote EV charging off-peak:

Average frequency of daily charging.

<sup>&</sup>lt;sup>50</sup> Ill. C. C. No. 1, Original Sheet No. 21.008.

<sup>&</sup>lt;sup>51</sup> *Id*.

563		<ul> <li>Average length of daily charging.</li> </ul>
564		<ul> <li>Timing of daily charging, including hourly breakdown.</li> </ul>
565 566		<ul> <li>Comparison of energy use profiles for customers enrolled in program-specific tariff/program to customers not enrolled.</li> </ul>
567		These additional reporting requirements will help to demonstrate the extent to which
568		customers are responding to various program and rate signals. This will also provide data
569		to calculate the benefits resulting from these various price signals.
570		We also recommend that Ameren report on the estimated avoided air emissions resulting
571		from its BE Plan.
572	Q.	Does Ameren propose to conduct an evaluation of its BE Plan?
573	A.	No. The Company does not indicate that it will conduct an evaluation of the tariffs and
574		programs included in its BE Plan.
575	Q.	What is your recommendation regarding an evaluation of Ameren's BE Plan?
576	A.	In addition to the annual reporting that the Company should continue to perform,
577		described above, Ameren should develop and propose an evaluation, measurement, and
578		verification ("EM&V") plan. This should include a proposed budget and timeline related
579		to the procurement of an independent, third-party EM&V contractor to assess the
580		performance of Ameren's BE Plan and develop recommendations for plan updates. The
581		contractor should have oversight from Staff.
582		The EM&V activities should include, at a minimum, verification of the metrics described
583		above; customer surveys to determine the extent to which Ameren's programs increased
584		EV adoption, charging behavior, and awareness of EVs; and net-to-gross evaluations to

determine the levels of free ridership by program. These activities will help to provide important information as to whether the BE Plan is having the intended effect, and if changes to program design and incentive levels are needed in the future. Ameren should use this information to update the BCA models filed as part of this BE Plan. This will provide increased visibility as to whether the projected benefits of the BE Plan are actually realized and will help to refine inputs for future BE Plan cost-effectiveness filed with future BE Plan updates.

Q. Does this conclude your testimony?

A. Yes, it does.