

**STATE OF ILLINOIS**  
**ILLINOIS COMMERCE COMMISSION**

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**AMEREN ILLINOIS COMPANY**  
**d/b/a Ameren Illinois**

**Revenue-Neutral Tariff Changes**  
**Related to Rate Design**

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**Docket No. 13-0476**

Direct Testimony and Exhibit of

**Robert R. Stephens**

On behalf of

**Illinois Industrial Energy Consumers**

October 17, 2013



STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION

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**Direct Testimony of Robert R. Stephens**

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Robert R. Stephens. My business address is 16690 Swingley Ridge Road, Suite 140,  
3 Chesterfield, MO 63017.

4 **Q WHAT IS YOUR OCCUPATION?**

5 A I am a consultant in the field of public utility regulation and Principal of Brubaker &  
6 Associates, Inc., energy, economic and regulatory consultants.

7 **Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

8 A This information is included in Appendix A to my testimony.

9 **Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

10 A I am testifying on behalf of the Illinois Industrial Energy Consumers ("IIEC"). IIEC  
11 companies have facilities and operations located in the Ameren Illinois Company  
12 ("Ameren" or "Company") service territory and are substantial users of electricity within  
13 that service territory.

14 **Q WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY IN THIS PROCEEDING?**

15 A I will address cost of service and revenue allocation issues. The fact that I do not  
16 address an issue should not be interpreted as tacit approval for any position taken by  
17 Ameren.

18 **Q PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.**

19 A My testimony can be summarized as follows:

20 1. Ameren's embedded cost of service ("ECOS") studies could be improved by  
21 further refinement of its segregation of primary versus secondary voltage costs.  
22 More specifically, single-phase distribution assets exist, and function to serve,  
23 exclusively or nearly exclusively, customers who take service at secondary  
24 voltages. Hence, cost-causation principles suggest that customers at higher  
25 voltages, such as transmission voltage or primary voltage generally should not  
26 be allocated single-phase primary system costs.

27 2. I recommend that the Illinois Commerce Commission ("ICC" or "Commission")  
28 direct the Company and all interested parties to review the merit of segregating  
29 the primary delivery system costs into single-phase and three-phase components  
30 and assigning the single-phase costs exclusively to secondary customers. This  
31 may include consideration of three-phase primary system costs that should be  
32 assigned exclusively to primary customers, if any. The parties should also  
33 discuss the best method to estimate the single-phase primary costs to be  
34 assigned to secondary customers. I also recommend that the Commission take  
35 a modest step in refining Ameren's ECOS studies in this regard in the current  
36 case, by assigning 10% to 20% of primary voltage costs to secondary  
37 customers. This is well below the expected proportion of Ameren single-phase  
38 primary costs, but this modification will be a step in the right direction.

39 3. Regarding revenue allocation, I recommend that the Commission accept in part  
40 and reject in part Ameren's proposed rate impact constraint. Specifically, I  
41 recommend the Commission reject the proposed new constraint of 0.05¢ per  
42 kWh.

43 **Cost of Service**

44 **Q HAVE YOU REVIEWED THE COMPANY'S TESTIMONY RELATED TO ITS ECOS**  
45 **STUDIES IN THIS CASE?**

46 A Yes, I have. IIEC witness Amanda Alderson has as well. These studies are presented  
47 by Ameren witness Ryan K. Schonhoff in Ameren Exhibit 2.0. As described in  
48 Mr. Schonhoff's testimony, Ameren presents various ECOS studies that represent the  
49 three rate zones.

50 **Q ARE AMEREN'S COST OF SERVICE STUDIES CONSISTENT WITH THOSE**  
51 **APPROVED IN DOCKET NO. 09-0306?**

52 A Yes. They appear to be generally consistent in terms of structure and approach.  
53 However, there are some minor differences, including introduction of a new allocation  
54 factor, as discussed in the testimony of IIEC witness Alderson.

55 In addition, Mr. Schonhoff summarizes certain modifications that Ameren is  
56 proposing at pages 4 through 5 of his direct testimony.

57 **Q DO YOU WISH TO COMMENT ON ANY OF MR. SCHONHOFF'S PROPOSED**  
58 **MODIFICATIONS?**

59 A Yes. Specifically, I would comment on Ameren's proposed modification to "Primary  
60 Distribution Line Allocator," as described at pages 9 through 13 of Mr. Schonhoff's  
61 testimony. I generally agree with Mr. Schonhoff's proposed use of a non-coincident  
62 peak ("NCP") allocator and his stated rationale for doing so. As Mr. Schonhoff explains  
63 more fully,

- 64 • Ameren's proposal is moderate. Mr. Schonhoff would only change the allocator for  
65 primary distribution lines, not primary substations.

- 66 • Staff's previous concerns about whether primary distribution lines and substations  
67 are built to serve multiple rate classes is overstated and incorrect in some cases.  
68
- 69 • The fact that the DS-5 lighting class fails to receive a single dollar of the cost to  
70 primary distribution lines under the coincident peak ("CP") allocation method, while  
71 clearly utilizing and benefiting from such lines, is indicative of the error of using the  
72 CP demand allocator.  
73
- 74 • Staff's prior concern regarding grain drying customers is no longer applicable, if  
75 Ameren's proposed DS-6 rate class is approved.

76 Allocating these costs fully on a CP basis, as approved in Docket No. 09-0306,  
77 was a departure from longstanding practice and is erroneous, in my view. Ameren's  
78 proposed return to a more logical allocation of these assets on an NCP basis is  
79 appropriate.

80 In addition, I agree with Mr. Schonhoff's proposed allocation of General and  
81 Intangible ("G&I") Plant investment related to Ameren's Advanced Meter Infrastructure  
82 ("AMI") plan, as described by Mr. Schonhoff at pages 15 through 16. These investments  
83 are related to Ameren's AMI Plan, heavily related to metering cost, and, accordingly,  
84 should be allocated to the delivery service rate classes using the same allocation factor  
85 approved for FERC Account 370-Meters, as proposed by Mr. Schonhoff, rather than the  
86 more general labor-related allocator applied to other G&I Plant investment.

87 **Q DO YOU HAVE ANY SUGGESTED ADJUSTMENTS TO THE COMPANY'S ECOS**  
88 **METHODOLOGY?**

89 **A** Yes. Ameren's ECOS studies could be improved by further refinement of its segregation  
90 of primary versus secondary voltage costs. Ameren's cost allocations in this case are

91 not complete, in terms of correctly evaluating the costs imposed by secondary  
92 customers versus primary customers.<sup>1</sup>

93 In the last Ameren-filed case Docket No. 11-0279, IIEC introduced the concept of  
94 further segregating primary voltage system costs between single-phase and three-phase  
95 subfunctions, as these systems serve largely different customer groups and,  
96 accordingly, the cost causation for these components also differs. More specifically,  
97 single-phase distribution assets exist, and function to serve, exclusively or nearly  
98 exclusively, customers who take service at secondary voltages.<sup>2</sup>

99 Hence, cost-causation principles suggest that customers at higher voltages, such  
100 as transmission voltage or primary voltage generally should not be allocated  
101 single-phase or dual-phase primary system costs.

102 **Q IS THERE SUPPORT IN COST OF SERVICE LITERATURE FOR THE CONCEPT**  
103 **YOU HAVE DESCRIBED?**

104 A Yes, there is. For example, page 97 of the most recent “Electric Utility Cost Allocation  
105 Manual” of the National Association of Regulatory Utility Commissioners states as  
106 follows:

107 Cost analysts developing the allocator for distribution of substations or  
108 primary demand facilities must ensure that only the loads of those  
109 customers who benefit from these facilities are included in the allocator.  
110 For example, loads of customers who take service at transmission level  
111 should not be reflected in the distribution substation or primary demand  
112 allocator. Similarly, when analysts develop the allocator for secondary  
113 demand facilities, the loads for customers served by the primary  
114 distribution system should not be included. (Emphasis added).

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<sup>1</sup>“Primary” voltage customers are those taking service at 600 volts to 15,000 volts, while “secondary” voltage customers take service at voltages below 600 volts. These are referred to as “primary customers” and “secondary customers,” respectively.

<sup>2</sup>In Docket No. 11-0279, Ameren indicated that just 0.2% of the electrical demand of primary or higher voltage customers were served via single-phase or dual-phase primary circuits. I would not expect the minute percentage to have changed significantly since that case.

115 Q IS THERE PRECEDENT IN OTHER JURISDICTIONS FOR THE KIND OF  
116 SEGREGATION THAT YOU ARE DISCUSSING?

117 A Yes, there is. I am aware of relatively recent decisions by the Public Service  
118 Commission of Wisconsin that are directly on point. For example, in  
119 Docket No. 6690-UR-120, involving Wisconsin Public Service Corporation (“WPSC”), the  
120 Wisconsin Commission acknowledged the value of recognizing single-phase and  
121 three-phase primary distribution circuit costs when assigning revenue responsibility. It  
122 directed its Staff to work with the utility, intervenors in the case, and other major  
123 Wisconsin investor-owned utilities to explore the issue further. As a result of this further  
124 exploration, and the acknowledgement of the appropriateness of the concept by the  
125 utility applicant, the Wisconsin Commission in 2012 approved the utility’s filed cost of  
126 service study, which segregated single-phase primary lines and allocated them to  
127 secondary customers.<sup>3</sup> Also in Wisconsin, in the current WPSC rate case,  
128 Docket No. 6690-UR-122, the utility has acknowledged the merit of such a distinction as  
129 a refinement to its ECOS study.<sup>4</sup> In that case, the proposal is to consider 50 percent of  
130 the cost of primary distribution costs as serving secondary customers, pending a more  
131 refined analysis.

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<sup>3</sup>Public Service Commission of Wisconsin Docket No. 05-UR-106 involving Wisconsin Electric Power Company. The issue is addressed at pages 24-25 of the direct testimony of utility witness Eric A. Rogers, which was filed on May 15, 2012 and which is available at the following link:

[http://psc.wi.gov/apps35/ERF\\_view/viewdoc.aspx?docid=164646](http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=164646)

<sup>4</sup>Public Service Commission of Wisconsin Docket No. 6690-UR-106. This issue is addressed at pages Rebuttal-WPSC-Hoffman Malueg-14 through 16, which was filed on September 16, 2013 and is available at the following link:

[http://psc.wi.gov/apps40/dockets/content/detail.aspx?dockt\\_id=6690-UR-122](http://psc.wi.gov/apps40/dockets/content/detail.aspx?dockt_id=6690-UR-122)

132 **Q HAS THE ILLINOIS COMMERCE COMMISSION ADDRESSED THIS ISSUE IN ANY**  
133 **RECENT ORDER IN A GENERAL DELIVERY SERVICE RATE CASE?**

134 A Yes, it has. IIEC introduced this concept in the 2010 Commonwealth Edison Company  
135 (“ComEd”) delivery service rate case, Docket No. 10-0467. In that case, IIEC identified  
136 a specific percentage of primary facility costs that should be allocated to secondary  
137 customers<sup>5</sup> and recommended that the Commission adopt the full amount that IIEC  
138 identified in that case. To my knowledge, the Commission had never considered this  
139 issue prior to IIEC’s introduction in its direct testimony in that rate case.

140 At page 176 of its Final Order in Docket No. 10-0467, in the Analysis and  
141 Conclusions section, the Commission states as follows:

142 Additionally, while the IIEC has presented its arguments in detail, it has  
143 not proffered any evidence to indicate that Staff is incorrect when opining  
144 that serving primary voltage customers on a circuit may require ComEd to  
145 incur the additional costs of a three-phase line, while a single-phase line  
146 could serve secondary loads.

147 The Commission went on to observe that:

148 Because, at this time, these costs do not appear to be as neatly (and  
149 fairly) segregable as the IIEC asserts, the Commission further concludes  
150 that, at this time, ComEd’s Primary Secondary split analysis did not  
151 violate the *Rate Design Investigation* Order on this issue. (Underlining  
152 emphasis added).

153 **Q WHAT DO YOU CONCLUDE FROM THE COMMISSION ANALYSIS AND**  
154 **CONCLUSIONS STATED ABOVE?**

155 A It is my understanding and belief that Staff fundamentally misunderstood the nature of  
156 designing and deploying the utility distribution system and how large customers utilize  
157 power in offering such an opinion. Power is generated and transported in a three-phase  
158 configuration. Primary customers did not cause this system design. Rather, this system

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<sup>5</sup>In Docket No. 10-0467, the IIEC witness estimated that 25% of ComEd’s overhead primary facilities and 33% of underground facilities were single-phase.

159 design is the most efficient to produce, transport and distribute power by utilities. Said  
160 another way, there would be a three-phase primary system even if not a single  
161 three-phase primary customer existed.

162 Customers who use three-phase service tend to be larger, such as DS-4  
163 customers and, thus, already pay higher total delivery costs than customers who only  
164 require single-phase service. In short, in the ComEd case, Staff effectively shifted the  
165 burden of disproving its speculation on IIEC,<sup>6</sup> rather than addressing straight-on the  
166 underlying concept of what customers the single-phase primary distribution system  
167 serves.

168 Second, as indicated in the Commission Analysis and Conclusions quoted  
169 above, the Commission seems to acknowledge that Docket No. 10-0467 was not the  
170 right time to make such an adjustment because it was not convinced at that time that the  
171 costs were neatly and fairly segregable. In this case, the costs are more neatly and  
172 fairly segregable than in the ComEd case, and my proposal, to be discussed later, is  
173 very conservative, pending further review and confirmation of the issue.

174 **Q WAS THIS ISSUE ADDRESSED IN THE LAST AMEREN DELIVERY SERVICE RATE**  
175 **CASE, WHICH WAS WITHDRAWN, DOCKET NO. 11-0279?**

176 A Yes, it was. In that case, the IIEC witness debunked some of the expressed concerns of  
177 the ICC Staff in the ComEd rate case and estimated the percentage of overhead and  
178 underground primary feeder costs associated with single-phase and dual-phase service.  
179 More specifically, IIEC estimated that about 38% of overhead primary lines were  
180 single-phase or dual-phase and that approximately 65% of underground primary lines

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<sup>6</sup>I refer to this as speculation, because in Docket No. 10-0467, the Staff witness never actually claimed that primary customers caused increased costs of the primary voltage system. Rather, Staff merely offered the possibility that primary customers cause such increases, without proof or evidence that this was the case.

181 were single-phase or dual-phase, and proposed a specific adjustment accordingly. In  
182 this case, I have used more specific information on costs and have determined different  
183 percentages, as will be discussed.

184 In that case, ICC Staff and Ameren opposed IIEC's specific adjustment, but the  
185 Commission never made a specific ruling, as it did not enter an order in the case.

186 **Q NOW THAT YOU HAVE INTRODUCED THE ISSUE GENERALLY AND DISCUSSED**  
187 **PRECEDENT FOR THE ISSUE, CAN YOU PLEASE PROVIDE MORE TECHNICAL**  
188 **BACKGROUND ON SINGLE-PHASE PRIMARY LINES AND HOW THEY ARE USED?**

189 **A** Yes. I will do so in the next section of my testimony.

### 190 **Single-Phase Primary Lines**

191 **Q WHAT IS THE MEANING OF THE TERM "PHASE" AS IT IS USED TO DESCRIBE**  
192 **SINGLE- OR THREE-PHASE PRIMARY DISTRIBUTION CIRCUITS?**

193 **A** The term "phase" refers to a particular characteristic of the distribution of alternating  
194 current. In the context of electrical distribution, the term "phase" simply refers to an  
195 energized conductor. Single-phase primary distribution *circuits* are composed of a  
196 single conductor that is energized to a primary voltage level, and a ground conductor.  
197 Three-phase primary distribution circuits consist of three energized conductors and a  
198 ground conductor. Thus, electrical power is transmitted via separate conductors for  
199 each phase. Household appliances, for example, typically operate on single-phase  
200 service, while industrial applications, such as large motors, may operate on either single-  
201 phase or three-phase service.

202 The majority of costs of single-phase and three-phase distribution facilities are  
203 recorded in Federal Energy Regulatory Commission ("FERC") Accounts 364 – Poles and

204 Towers, 365 – Overhead Conductors and Devices, 366 – Conduit and 367 –  
205 Underground Cables and Devices. My discussion and proposal relates to costs in these  
206 accounts.

207 **Q WITH RESPECT TO ELECTRICAL DISTRIBUTION SYSTEMS, HOW DOES THE**  
208 **NUMBER OF PHASES RELATE TO THE VOLTAGE LEVEL?**

209 A Theoretically, the number of phases and the voltage level are independent parameters  
210 of a distribution system. Therefore, a single-phase or three-phase circuit could operate  
211 at one of any number of primary or secondary voltages. Likewise, a primary or  
212 secondary voltage customer could receive single-phase, dual-phase or three-phase  
213 service.

214 However, it is well known in the electric utility industry that certain phase/voltage  
215 combinations can lead to localized system load imbalances, which in turn, can cause  
216 voltage instabilities. Perhaps the most widely recognized problematic combination is the  
217 use of a single-phase primary circuit to serve a large primary voltage customer. Such  
218 phase/voltage combinations typically are used to serve primary voltage customers only  
219 when no other alternative is available. Consequently, costs of single-phase primary  
220 distribution circuits are incurred predominantly, if not exclusively, to serve secondary  
221 voltage customers. This is the case on the Ameren system as well.

222 **Q DOES THIS MEAN THAT THREE-PHASE PRIMARY COSTS ARE INCURRED**  
223 **EXCLUSIVELY OR PREDOMINANTLY TO SERVE THREE-PHASE PRIMARY**  
224 **CUSTOMERS?**

225 A No. As I previously discussed, in order to ensure the efficient delivery of power, there  
226 would have to be a three-phase primary system, even if there were not a single  
227 three-phase primary customer on the system.

228 **Q WHAT IS THE COMPANY'S METHOD OF ALLOCATING SINGLE-PHASE AND**  
229 **THREE-PHASE DISTRIBUTION COSTS TO CUSTOMER CLASSES IN ITS ECOS**  
230 **STUDIES?**

231 A In its ECOS studies, Ameren allocates the costs of single-phase and three-phase  
232 primary circuits to both primary and secondary customers because those circuits operate  
233 at primary voltage levels. In my experience, single-phase primary circuits are rarely, if  
234 ever, used to serve primary customers, as was confirmed by Ameren in the last rate  
235 case. Costs associated with facilities used to serve secondary customers, like  
236 single-phase components, should be allocated to secondary customers. When the  
237 results of Ameren's analysis are reflected in the ECOS studies, these single-phase  
238 primary circuit costs are misallocated and the cost of distributing electricity to primary  
239 customers is overstated.

240 **Q WHAT IS THE IMPACT OF THE COMPANY'S METHOD ON THE ALLOCATION OF**  
241 **DISTRIBUTION COSTS IN ITS ECOS STUDIES?**

242 A In the instant case, the Company presented the necessary data in a workpaper to  
243 calculate the cost of single-phase and multi-phase circuits on the Ameren system. These

244 data indicate that approximately 54% of all primary distribution line costs were for  
245 single-phase or dual-phase. This is broken down as shown in Table 1, below:

	<b><u>Single- and Dual-phase Primary</u></b>	<b><u>Primary Total</u></b>	<b><u>Percent of Total</u></b>
<b>Overhead</b>	\$935,539	\$1,872,185	50.0%
<b>Underground</b>	<u>348,772</u>	<u>512,664</u>	68.0%
<b>Total</b>	\$1,284,311	\$ 2,384,849	53.9%

246 These values indicate that this matter is significant and should be given proper  
247 investigation by the Company and the Commission.

248 **Q WOULD YOU EXPECT SUCH PERCENTAGES TO CHANGE SIGNIFICANTLY OVER**  
249 **TIME?**

250 **A** No, I would not expect this to be the case, as it would require a major reconfiguration of  
251 Ameren's distribution network. However, given the Commission's earlier-mentioned  
252 concerns in the ComEd case, Docket No. 10-0467, about single-phase primary costs not  
253 being as cleanly and neatly segregable from the remaining primary costs, I believe that  
254 some further investigation of this issue may be warranted.

255 It would be better to rely on my estimates of the amount of costs of the primary  
256 system that are single-phase and serving only secondary customers from this case

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<sup>7</sup>Ameren defines primary distribution lines as follows:  
"Primary distribution lines are defined as overhead or underground distribution circuits recorded in the Company's plant accounting records under FERC Accounts 364-367 with phase voltage greater than 600 Volts but less than 30,000 Volts." (Ameren Ex. 2.0, page 9, footnote 2.)

257 rather than assume that none of the costs are associated with such facilities. The  
258 Commission would do better to rely on these estimates of the cost of primary facilities  
259 that are single-phase or dual-phase and serving only secondary customers than to adopt  
260 the current assumption that 100% of the single-phase and dual-phase facilities serve  
261 both primary and secondary customers.

262 For these reasons, and because proper allocation of single-phase and  
263 three-phase primary distribution circuits is still a relatively new concept to Illinois utilities  
264 and regulators, further investigation of the issue and quantification of the associated  
265 costs may be warranted before full recognition of an adjustment is made in this regard.

266 **Q WHAT DO YOU RECOMMEND IN THIS REGARD?**

267 A My recommendation is twofold. First, I recommend that Commission direct the  
268 Company and all interested parties to review the merit of segregating the primary  
269 delivery system costs into single-phase and three-phase components and assigning the  
270 single-phase costs exclusively to secondary customers. This may include consideration  
271 of three-phase costs caused by primary customers that should be assigned exclusively  
272 to primary customers, if any. The parties should also discuss the best method to  
273 estimate the single-phase primary costs to be assigned to secondary customers. I have  
274 made an identical recommendation in the current ComEd rate case,  
275 Docket No. 13-0387. Because this issue is important and is raised in the context of both  
276 the ComEd and now Ameren delivery service rate cases, I recommend that such  
277 investigation and/or workshops be conducted jointly, in order that all interested parties  
278 can have input. Then, Ameren and the Commission should seek to implement the  
279 results of that investigation at the earliest appropriate opportunity, but no later than the  
280 Company's next rate design proceeding.

281 I also recommend that the Commission take a modest step in refining the  
282 Ameren ECOS study in this regard in the current case.

283 **Q PLEASE DESCRIBE THE MODEST STEP THAT YOU RECOMMEND.**

284 A As mentioned previously, in Ameren's last delivery service rate case, IIEC estimated that  
285 single-phase primary costs constituted 38% to 65% of primary facility costs and in this  
286 case, I have estimated it at 54% of total primary lines cost.<sup>8</sup> To my knowledge, no party  
287 provided any alternate estimates suggesting a lower percentage. Therefore, a very  
288 conservative step toward the refinement of the primary/secondary split analysis would be  
289 to recognize 10% to 20% of the primary costs as single-phase. Then, as segregation  
290 methods are further refined through the process that I recommend above, the  
291 percentage can be adjusted accordingly.

292 I have asked IIEC witness Amanda Alderson to adjust Ameren's main ECOS  
293 study to reflect this conservative step, i.e., 10% and 20%, and to present the results for  
294 the Commission's review and potential use. I recommend this adjustment be directed in  
295 whatever version of ECOS study is ultimately approved by the Commission in this case.

## 296 **Revenue Allocation**

297 **Q HAVE YOU REVIEWED COMED'S TESTIMONY AS IT RELATES TO REVENUE**  
298 **ALLOCATION?**

299 A Yes, I have. This subject is addressed by Ameren witness Leonard Jones, in Ameren  
300 Exhibit 1.0.

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<sup>8</sup>I do not have a specific estimate of poles or underground conduit costs, but it is reasonable to assume that the percentages would be similar to overhead and underground line cost, respectively.

301 **Q WHAT IS AMEREN'S APPROACH AS IT RELATES TO REVENUE ALLOCATION IN**  
302 **THIS CASE?**

303 A Mr. Jones' addresses this at pages 10 through 17 of his direct testimony. Briefly,  
304 Mr. Jones indicates that he relied upon the electric ECOS studies provided by Ameren  
305 witness Schonhoff and that his revenue allocation methodology begins with the class  
306 cost of service study for determining how much test year revenue each individual rate  
307 class should pay. He goes on to indicate that these cost of service guidelines are  
308 tempered to mitigate potential undue customer bill impacts, and describes a revenue  
309 allocation methodology that outlines the process for tempering full movement toward  
310 cost of service, with the end goal of eventually moving each class to full cost of service  
311 pricing over the course of multiple future rate cases. Mr. Jones acknowledges the  
312 moderation method established by the Commission in the last full Ameren rate case,  
313 Docket No. 09-0306, but claims that the existing methodology is inadequate to address  
314 certain situations, as he describes at page 12 of his testimony. Accordingly, he  
315 proposes a new revenue allocation methodology to replace the Commission's current  
316 methodology by introducing additional parameters, as described at page 14 of his  
317 testimony. Specifically, he recommends that the impact moderation constraint would be  
318 changed to the greater of:

- 319 1) 0.05 ¢/kWh;
- 320 2) 10%; or
- 321 3) a constraint multiple of the system average increase based on a sliding scale  
322 starting at 1.5 times system increase for overall increases less than 10%,  
323 and reduced by 0.0125 for each percentage point of average system increase  
324 greater than 10%, but not less than a factor of 1.0.

325 Mr. Jones goes on to explain certain constraints and how to apply his three-prong  
326 moderation method described above.

327 **Q WHAT IS THE CURRENT MODERATION APPROACH APPROVED BY THE ICC?**

328 A As discussed by Mr. Jones at page 11 of his testimony in Docket No. 09-0306, the  
329 Commission directed that no class or sub-class should receive an increase in delivery  
330 service charges greater than 1.5 times the system average increase. This is  
331 comparable to Mr. Jones' third criterion above.

332 **Q DO YOU HAVE A POSITION AS TO THE AMOUNT OF MOVEMENT THAT SHOULD**  
333 **BE MADE TOWARD COST OF SERVICE IN THIS CASE?**

334 A I do, but to begin I would like to give some background on the current moderation  
335 approach. In Docket No. 09-0306, the Commission mitigated the rate impact on certain  
336 rate classes and sub-classes of Ameren customers, due to the enormous increases  
337 proposed by Ameren in that case. As mentioned, the Commission adopted the proposal  
338 of IIEC, to moderate the impact of the rate increase such that each customer class, or  
339 sub-class, received an increase in delivery service charges of no greater than 1.5 times  
340 the system average increase for each rate zone. This approved moderation proposal  
341 has been applied by Ameren and the Commission to date.

342 **Q HAVE YOU REVIEWED THE RATE IMPACTS THAT WOULD RESULT FROM MR.**  
343 **JONES' PROPOSED MODERATION CRITERIA?**

344 A Yes, I have. My focus is primarily on the rates paid by industrial customers such as IIEC  
345 members. Industrial customers are served within the various voltage-differentiated  
346 sub-classes of the DS-4 class.

347 **Q PLEASE SUMMARIZE THE PERCENTAGE INCREASES PROPOSED BY AMEREN,**  
348 **BASED ON APPLICATION OF MR. JONES' RATE MODERATION CRITERIA.**

349 **A** This information is summarized in Table 2 below.

<b>Rate Class</b>	<b>Rate Zone I</b>	<b>Rate Zone II</b>	<b>Rate Zone III</b>
DS-1 Residential Service	1.3%	-7.2%	-5.2%
DS-2 Small General Service	12.7%	0.6%	8.1%
DS-3 General Service	-0.7%	-9.2%	-5.1%
DS-4 Large General Service	18.0%	14.6%	16.7%
DS-5 Protective Lighting Service	10.0%	-6.9%	7.9%
DS-6 (DS-3) Temperature Sensitive Service	-23.7%	-16.9%	-27.5%
DS-6 (DS-4) Temperature Sensitive Service	-26.8%	-11.8%	-34.0%

350 As can be seen in Table 2 above, the proposed increase for the DS-4 class is higher  
351 than the increases for every other rate class.

352 **Q AS MR. JONES EXPLAINS, RATE MODERATION CRITERIA HAVE BEEN APPLIED**  
353 **AT THE SUB-CLASS LEVEL TO DATE. PLEASE PROVIDE THE IMPACT OF**  
354 **AMEREN'S PROPOSED INCREASES ON THE DS-4 SUB-CLASSES.**

355 **A** This information is provided in Table 3 below.

<sup>9</sup>Reflects changes between rates proposed in Docket No.13-0301 and the Hypothetical Rate Redesign as shown on Ameren Exhibit 1.3, pages 5-7 of 14.

TABLE 3

**Impact of Ameren Proposed Increases on the DS-4 Sub-classes<sup>10</sup>**

<b>DS-4 Sub-classes</b>	<b>Rate Zone I</b>	<b>Rate Zone II</b>	<b>Rate Zone III</b>
DS-4 Secondary	-69%	-69%	-69%
DS-4 Primary	9%	8%	6%
DS-4 High Voltage	29%	45%	20%
DS-4 +100 kV	296%	306%	243%

356 As can be seen, the impacts on the High Voltage and 100 kV and Above sub-class  
357 customers are much greater than on the lower voltage sub-class customers. The  
358 increases proposed by Ameren for the customers in these sub-classes illustrate an  
359 unfortunate disregard of the principles of rate continuity and avoidance of rate shock in  
360 Ameren's proposal, and generally run counter to the conclusion of the Commission in  
361 Docket No. 09-0306, where it stated:

362 "IIEC recommends that rate moderation be implemented at the subclass  
363 level. Given the concern over the impact of the change in the PURA tax  
364 allocation, the Commission is inclined to agree. Moreover, IIEC has  
365 expressed its willingness to accept Staff's rate mitigation approach if it is  
366 applied at the subclass level. The Commission sees no reason why  
367 Staff's proposal based on a 150% increase limit could not be applied at  
368 the subclass level, as suggested by IIEC." (Final Order,  
369 Docket No. 09-0306, at 295, emphasis added.)

370 **Q CAN YOU ILLUSTRATE THE IMPACT ON A HYPOTHETICAL INDUSTRIAL**  
371 **CUSTOMER?**

372 **A** Yes, I can. For this purpose, I have modeled hypothetical industrial customer impacts,  
373 assuming an 81 MW customer with a load factor of 79% and provide the results for each  
374 of the rate zones, in Table 4 below. I have shown only the DS-4 High Voltage and

<sup>10</sup>Reflects changes between rates proposed in Docket No. 13-0301 and the Hypothetical Rate Redesign, same as Table 2, as shown on Ameren Exhibit 1.3, pages 5-7 of 14.

375 100 kV and Above sub-classes in which the majority of very large load customers take  
 376 service and which are most significantly impacted.

**TABLE 4**

**Annual Cost Impact of Ameren's Delivery Service Rate Case<sup>11</sup>  
Hypothetical 81 MW, 79% Load Factor, 95% Power Factor, DS-4 customer**

<b>High Voltage (15kV-100kV)</b>	<b><u>Rate Zone I</u></b>	<b><u>Rate Zone II</u></b>	<b><u>Rate Zone III</u></b>
Cost Under Proposed Rates (Docket 13-0301)	\$1,172,022	\$714,528	\$1,383,617
Cost Under Hypothetical Rate Redesign	\$1,576,699	\$1,056,423	\$1,763,405
Increase/(Decrease)	\$404,677	\$341,895	\$379,788
Percent	35%	48%	27%
	<b><u>Rate Zone I</u></b>	<b><u>Rate Zone II</u></b>	<b><u>Rate Zone III</u></b>
<b>+100 kV</b>			
Cost Under Proposed Rates (Docket 13-0301)	\$195,525	\$214,963	\$195,884
Cost Under Hypothetical Rate Redesign	\$476,504	\$741,028	\$496,011
Increase/(Decrease)	\$280,978	\$526,065	\$300,127
Percent	144%	245%	153%

377 As can be seen in Table 4 above, such a hypothetical customer at +100 kV would pay  
 378 between 144% and 245% more in annual distribution delivery cost under Ameren's  
 379 proposal, depending on the rate zone. In addition, some IIEC members will see cost  
 380 increases higher than those shown for the hypothetical customer above.

<sup>11</sup>Delivery Service charges only. Excludes transformation charges, meter reassignment charges and taxes (other than Electric Distribution Tax).

381 Q AT PAGES 12 THROUGH 13 OF HIS TESTIMONY, MR. JONES PRESENTS BILL  
382 IMPACTS THAT COMBINE DELIVERY SERVICE, COST OF POWER SUPPLY, AND  
383 TRANSMISSION SERVICE AND SUGGESTS THAT THE COMBINED BILL IMPACT  
384 IS A PERTINENT MEASURE. HOW DO YOU RESPOND?

385 A It is highly inappropriate to include the cost of power supply or any other energy or  
386 commodity supply or transmission costs in such an analysis, as they are not relevant to  
387 electric delivery service charges. Ameren does not provide the electricity distribution  
388 supply for the vast majority of DS-4 customers, as well as many DS-3 customers.  
389 Ameren is no longer required to provide fixed price energy supply service to such  
390 customers. As a result, nearly all of these customers procure power from a third-party  
391 provider.

392 More importantly, this is a distribution delivery service rate case. The cost of  
393 electricity has no bearing on what the delivery service rates should be. Rather, the  
394 regulated distribution delivery service rates should be based on the prudent and used  
395 and useful investments in providing distribution delivery service and a recovery of  
396 reasonable delivery service-related expenses of Ameren Illinois. The electricity  
397 commodity costs paid to other entities are no more relevant to the reasonableness of  
398 Ameren's delivery service rates than would be the cost of natural gas, the cost of  
399 gasoline, the cost of food, the cost of labor, or any other cost faced by Ameren's  
400 customers, as part of their cost of living or doing business. By analogy, Ameren's  
401 position is akin to basing the reasonableness of an increase in U.S. postage delivery  
402 rates on the value of the contents inside the envelopes. Similarly, if my cost of car  
403 insurance doubled, it would be rate shock, irrespective of the other costs of car  
404 ownership, e.g., loan payments, gasoline, or repairs and maintenance.

405 The regulated delivery service rates that Ameren proposes must be considered  
406 on their own, and should not be combined with costs of irrelevant commodities or  
407 services when determining whether rate impacts are reasonable.

408 This is not the first time that Ameren has attempted to mask the level of its  
409 proposed increases in DS-4 charges by providing comparative statistics that include  
410 costs that have no bearing on the delivery service charges that are at issue in this case.  
411 The most egregious attempt at this was conducted in Ameren's 2009 rate case, Docket  
412 No. 09-0306, where the evidence in that case showed that Ameren tried to obscure the  
413 unprecedented size of its delivery service rate increase to DS-4 customers by  
414 considering irrelevant costs in its analysis.<sup>12</sup> To its credit, the Commission did not  
415 appear to take Ameren's obfuscation by inclusion of commodity costs in the rate impact  
416 analysis into account in determining the proper rate moderation approach, which  
417 remains in place today.

418 Accordingly, Mr. Jones' analysis where he includes such irrelevant charges, at  
419 pages 12 through 13 of his testimony should be largely disregarded.

420 **Q DO YOU HAVE ANY CONCERNS ABOUT THE THREE-PRONG RATE**  
421 **MODERATION CRITERIA PREVIOUSLY INTRODUCED?**

422 **A** Yes, I do. My greatest concern is with the first criterion, Ameren's proposed 0.05 cents  
423 per kWh threshold. Ameren considers this as reasonable, on a total bill basis, rather  
424 than on the delivery service only basis, in direct contradiction to the concept I just  
425 discussed. This can be seen by viewing Mr. Jones' testimony at page 13, in the bottom  
426 box of the table shown on that page, which is reproduced below.

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<sup>12</sup>See Order, Docket No. 09-0306 at pages 291 through 293.

**Using ¢/kWh Constraint Rather Than Percent of DS**

		0.050		<u>Est Tot Bill Chg</u>	
		<u>Present</u>	<u>¢/kWh DS Adj</u>	<u>Cents</u>	<u>Percent</u>
<b>DS-4+100 kV</b>	Delivery Service	0.044	0.094	0.050	114.11%
	Supply (Including Trans.)	<u>4.000</u>	<u>4.000</u>	<u>0.000</u>	<u>0.00%</u>
	Total	4.044	4.094	0.050	1.24%

427 As can be seen from above, by considering an irrelevant supply charge, Mr. Jones  
 428 focuses on the 1.24% figure, and would set a percent change in delivery service bill of  
 429 over 114% for such customers, as highlighted above. This percentage increase is well  
 430 in excess of that previously deemed acceptable by the Commission for this sub-class.  
 431 Accordingly, this particular criterion should be rejected.

432 Mr. Jones' other two criteria, specifically those stated at page 14, lines 283  
 433 through 287 are reasonable. With rejection of the first moderation constraint, Ameren's  
 434 proposed impact mitigation constraint would be changed to the greater of:

- 435 1) 10%; or
- 436 2) a constraint multiple of the system average increase based on a sliding scale  
 437 starting at 1.5 times system increase for overall increases less than 10%,  
 438 and reduced by 0.0125 for each percentage point of average system increase  
 439 greater than 10%, but not less than a factor of 1.0.

440 The second constraint outlined above (the third constraint proposed by  
 441 Mr. Jones) is a refinement of the Commission's currently approved mitigation criterion of  
 442 1.5 times the system average increase, but appropriately takes into account impacts in  
 443 the event of very large increases in delivery service costs (greater than 10%).

444 The first constraint outlined above, the 10% (which is Mr. Jones' second  
 445 criterion), is a reasonable concept, and takes into account the possibility that delivery  
 446 service increases may be very small or even negative. Without this criterion, if a delivery  
 447 service increase was 1%, for example, the 1.5 times the system average increase

448 constraint would suggest that an increase in delivery service charges of greater than  
449 1.6% would not be moderate. This is not a reasonable result. Mr. Jones introduced  
450 such a concept in his rebuttal testimony in Docket No. 11-0279 and I agreed to it in my  
451 rebuttal testimony in that case, provided that it is applied at the sub-class level, to ensure  
452 that more customers are adequately protected. It remains appropriate in this case.

453 Use of these two criteria should ensure that any rate class or sub-class that is  
454 paying revenues sufficiently below costs, as determined in an approved ECOS study,  
455 will receive a minimum 10% increase in total delivery service charges, irrespective of  
456 whether other classes receive a delivery service rate increase or decrease.

457 To the extent that Mr. Jones believes application of the two criteria outlined  
458 above do not allow sufficient movement toward cost of service, I would recommend that  
459 he proposed to modify the values, e.g., 10% or 1.5 times, rather than try to introduce a  
460 third, irrelevant, constraint, which is poorly conceived and which does not provide  
461 adequate moderation.

462 **Q HAVE YOU CALCULATED AMEREN'S PROPOSED REVENUE ALLOCATION THAT**  
463 **WOULD RESULT FROM ELIMINATION OF AMEREN'S FIRST RATE MODERATION**  
464 **CONSTRAINT AS DESCRIBED ABOVE?**

465 **A** Yes, I have. These are provided in IIEC Exhibit 1.1 attached to this testimony. The  
466 results produced under this method are far more moderate than the large increases  
467 proposed by Ameren, as indicated in Table 3 of my testimony presented above, yet still  
468 provide movement toward cost of service.

469 **Q AT PAGES 17 THROUGH 26 OF HIS DIRECT TESTIMONY, AMEREN WITNESS**  
470 **JONES ADDRESSES THE ELECTRIC DISTRIBUTION TAX. PLEASE COMMENT ON**  
471 **HIS TESTIMONY IN THIS REGARD.**

472 A The Distribution Tax issue is one that I know well, having addressed it in the last two  
473 Ameren rate cases.<sup>13</sup> This became a major rate issue when Ameren proposed to  
474 change the allocation of the Distribution Tax from its former plant in service basis to an  
475 energy basis. This change in view of the tax shifted major cost responsibility onto the  
476 DS-4 class, and, accordingly, required significant rate moderation measures for  
477 promoting rate continuity and avoidance of rate shock. In addition, Ameren has taken  
478 this relatively ordinary expense element in its cost structure and set it forth in a separate  
479 rider for collection on a per kWh basis, inconsistent with other similar cost elements in  
480 Ameren's rates.

481 **Q ARE YOU CHALLENGING THE ALLOCATION OF DISTRIBUTION TAX EXPENSE IN**  
482 **AMEREN'S COST OF SERVICE STUDIES OR COLLECTION IN RATES IN THIS**  
483 **CASE?**

484 A No, I am not. The Commission has ruled on this and, although I respectfully disagree  
485 with the way it ruled, I am not challenging that aspect.

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<sup>13</sup>The tax was often referred to as "PURA Tax" in those prior cases.

486 **Q AT PAGES 23 THROUGH 24 OF HIS TESTIMONY, MR. JONES SUGGESTS THAT**  
487 **THE .05 CENT PER KWH INCREASE CONSTRAINT CAN RESULT IN ELIMINATION**  
488 **OF THE DISTRIBUTION TAX SUBSIDY WITHIN THE NEXT THREE OR FEWER**  
489 **FORMULA RATE UPDATE PROCEEDINGS. HOW DO YOU RESPOND?**

490 A “Three or fewer” is another indication of the lack of protection caused by the 0.05 cents  
491 per kWh constraint. In contrast, Mr. Jones indicates on the same page of his testimony  
492 that equalized Distribution Tax pricing would require 13 iterations of 10% increases to  
493 achieve uniform EDT values. Essentially, what he is saying is that it should be  
494 acceptable to customers to absorb 13 iterations of 10% increases in “three or fewer”  
495 increases. This demonstrates the lack of regard that Mr. Jones is showing for rate  
496 moderation for certain customer classes and reinforces my proposal to eliminate the  
497 0.05 cent per kWh constraint.

498 According to page 26 of his testimony, Mr. Jones suggests that the alleged  
499 Distribution Tax “subsidy” amount is reduced from \$13.3 million to \$3.8 million, or 71% in  
500 this case alone. This nearly \$10 million shift to the DS-4 class is too large of a hit for  
501 one case, and should be spread more gradually, consistent with my rate moderation  
502 recommendation.

503 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

504 A Yes, it does.

**Qualifications of Robert R. Stephens**

505 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

506 A Robert R. Stephens. My business address is 16690 Swingley Ridge Road,  
507 Suite 140, Chesterfield, MO 63017.

508 **Q PLEASE STATE YOUR OCCUPATION.**

509 A I am a consultant in the field of public utility regulation and a Principal in the firm of  
510 Brubaker & Associates, Inc., energy, economic and regulatory consultants.

511 **Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

512 A I graduated from Southern Illinois University at Carbondale in 1984 with a Bachelor of  
513 Science degree in Engineering. During college, I was employed by Central Illinois  
514 Public Service Company in the Gas Department. Upon graduation, I accepted a  
515 position as a Mechanical Engineer at the Illinois Department of Energy and Natural  
516 Resources. In the summer of 1986, I accepted a position as Energy Planner with City  
517 Water, Light and Power, a municipal electric and water utility in Springfield, Illinois.  
518 My duties centered on integrated resource planning and the design and  
519 administration of load management programs.

520 From July 1989 to June 1994, I was employed as a Senior Economic Analyst  
521 in the Planning and Operations Department of the Staff of the Illinois Commerce  
522 Commission. In this position, I reviewed utility filings and prepared various reports  
523 and testimony for use by the Commission. From June 1994 to August 1997, I worked  
524 directly with a Commissioner as an Executive Assistant. In this role, I provided

525 technical and policy analyses on a broad spectrum of issues related to the electric,  
526 gas, telecommunications and water utility industries.

527 In May 1996, I graduated from the University of Illinois at Springfield with a  
528 Master of Business Administration degree.

529 In August 1997, I joined Brubaker & Associates, Inc. as a Consultant. Since  
530 that time, I have participated in the analysis of various utility rate and restructuring  
531 matters in several states and the evaluation of power supply proposals for clients. I  
532 am currently a Principal in the firm.

533 The firm of Brubaker & Associates, Inc. provides consulting services in the  
534 field of energy procurement and public utility regulation to many clients, including  
535 large industrial and institutional customers, some utilities, and on occasion, state  
536 regulatory agencies. More specifically, we provide analysis of energy procurement  
537 options based on consideration of prices and reliability as related to the needs of the  
538 client; prepare rate, feasibility, economic and cost of service studies relating to energy  
539 and utility services; prepare depreciation and feasibility studies relating to utility  
540 service; assist in contract negotiations for utility services; and provide technical  
541 support to legislative activities.

542 In addition to our main office in St. Louis, the firm also has branch offices in  
543 Phoenix, Arizona and Corpus Christi, Texas.