

ILLINOIS COMMERCE COMMISSION

DOCKET No. 13-_____

DIRECT TESTIMONY

OF

RYAN K. SCHONHOFF

Submitted on Behalf Of

AMEREN ILLINOIS COMPANY

d/b/a Ameren Illinois

July 22, 2013

TABLE OF CONTENTS

I. INTRODUCTION 1

 A. Witness Identification 1

 B. Purpose, Scope and Identification of Exhibits 2

II. COST OF SERVICE STUDIES 6

 A. Discussion of Currently-Approved Cost of Service Methodology 6

 B. Discussion of Proposed Modifications to ECOSS 6

 1. Supply Voltage and Service Voltage Recognition 7

 2. Primary Distribution Line Allocator 9

 3. Functionalization of Overhead Distribution Lines 13

 4. Advanced Meter Infrastructure ("AMI") Plan Investment 15

 C. Results of Cost of Service Studies 17

III. RATE DESIGN 19

 A. Delivery Service Charges – Rate MAP-P Pricing Development 19

 B. Pricing 21

 C. DS-6 Temperature Sensitive Delivery Service 25

 D. Bill Comparisons 32

IV. Proposed Tariff Changes 32

V. CONCLUSION 33

1 **ILLINOIS COMMERCE COMMISSION**

2 **DOCKET No. 13-_____**

3 **DIRECT TESTIMONY OF**

4 **RYAN K. SCHONHOFF**

5 **Submitted on Behalf Of**

6 **Ameren Illinois**

7 **I. INTRODUCTION**

8 **A. Witness Identification**

9 **Q. Please state your name and business address.**

10 A. My name is Ryan K. Schonhoff and my business address is One Ameren Plaza, 1901
11 Chouteau Avenue, St. Louis, Missouri 63103.

12 **Q. By whom are you employed and in what capacity?**

13 A. I am employed as a Regulatory Consultant for Ameren Illinois Company d/b/a Ameren
14 Illinois ("Ameren Illinois", "AIC", or "the Company").

15 **Q. What are your current responsibilities as a Regulatory Consultant?**

16 A. My current responsibilities include conducting analysis of gas and electric retail rates and
17 rate design, performing class cost of service studies, testifying in regulatory proceedings, and
18 engaging in other rate or regulatory projects as assigned. My responsibilities also include
19 performing wholesale cost of service studies, rate design, and other related projects falling under
20 Federal Energy Regulatory Commission ("FERC") jurisdiction.

21 **Q. Please describe your educational background and relevant work experience.**

22 A. Please see my Statement of Qualifications attached as an Appendix to this direct
23 testimony.

24 **B. Purpose, Scope and Identification of Exhibits**

25 **Q. What is the purpose of your direct testimony?**

26 A. The purpose of my direct testimony is to present various proposals to modify the rate
27 design and cost allocation methodologies used by the Company to determine performance-based
28 formula rates under its Rate Modernization Action Plan – Pricing ("Rate MAP-P") tariff. I also
29 present a proposal to establish a new rate class, DS-6 - Temperature Sensitive Delivery Service.
30 The cost allocation and rate design methodologies approved at the conclusion of this proceeding,
31 once implemented, are intended to supersede the methodologies derived from Docket No. 09-
32 0306(cons.), which are the current methodologies used to implement rates resulting from AIC
33 formula rate update filings. For additional discussion on the proposed cost allocation and rate
34 design methodology changes, please see the testimony of Ameren witnesses Jones and Martin.

35 To be clear, the delivery service charges presented in this filing are not intended to
36 supersede current delivery service charges or those proposed in the Company's pending formula
37 rate update filing, docketed as Docket No. 13-0301. As a baseline for comparison, AIC has
38 utilized the delivery service charges proposed in its supplemental direct filing in Docket No. 13-
39 0301, and modeled changes from that starting point for the purposes of this proceeding.

40 **Q. Please generally describe your testimony and the analysis you performed for this**
41 **filing.**

42 A. My testimony and analysis presents the results of AIC's modified Embedded Cost of
43 Service Studies ("ECOSS") for its three Rate Zones based on the Rate Zone-level revenue
44 requirements presented by the Company in its supplemental direct filing in Docket No. 13-0301,

45 as modified by Ameren witness Steven Martin to accommodate the reallocation of certain costs
46 among the Rate Zones. I also propose several modifications to the Company's existing rate
47 design methodology and perform the calculations necessary to produce new delivery service
48 charges that will recover the Company's full revenue requirement. Ameren witness Leonard
49 Jones performs AIC's revenue allocation calculations by applying rate mitigation constraints to
50 the rate classes, and discusses rate uniformity procedures to be utilized in future formula rate
51 update proceedings. These revenue allocations and mitigation constraints are incorporated in the
52 final rate design and pricing development.

53 **Q. Are you sponsoring any exhibits with your direct testimony?**

54 **A.** Yes. I am sponsoring the following exhibits:

- 55 • Ameren Exhibit 2.1: Current Cost of Service Study Methodology, as Presented
56 in Ameren Exhibit 7.0 in Docket No. 13-0301
- 57 • Ameren Exhibit 2.2: Supply Voltage and Service Voltage Methodology, as
58 presented in Docket No. 11-0279
- 59 • Ameren Exhibit 2.3: Bundled Results of Modified ECOSS, excluding the 2012
60 reconciliation
- 61 • Ameren Exhibit 2.4: Unbundled Results of Modified ECOSS, excluding the 2012
62 reconciliation
- 63 • Ameren Exhibit 2.5: Bundled Results of Modified ECOSS, including the 2012
64 reconciliation
- 65 • Ameren Exhibit 2.6: Bundled Results of ECOSS, as presented in Docket No. 13-
66 0301

- 67 • Ameren Exhibit 2.7: Comparison of pricing presented in Docket No. 13-0301 and
68 pricing that, if implemented, would result from the modifications proposed in
69 this proceeding
- 70 • Ameren Exhibit 2.8: Meter and Customer Charge Development
- 71 • Ameren Exhibit 2.9: DS-6 Temperature Sensitive Delivery Service Tariff
- 72 • Ameren Exhibit 2.10: Bill Comparisons

73 **Q. Please summarize your recommended modifications to the Company's cost of**
74 **service methodology.**

75 A. I recommend that:

- 76 • The cost of service methodology presented herein provides a fair and reasonable
77 departure from the methodology currently utilized for Rate MAP-P price
78 development and should be approved by the Illinois Commerce Commission ("the
79 Commission" or "ICC"). Specifically;
- 80 ▪ The Company should be authorized to recognize Supply Voltage and
81 Service Voltage when allocating demand-related distribution plant;
- 82 ▪ The Company should be authorized to use the Non-Coincident Peak
83 ("NCP") Demand method to allocate primary distribution lines rather than
84 Coincident Peak ("CP") Demand method;
- 85 ▪ The Company should be authorized to utilize the improved method of
86 functionalizing overhead distribution lines described below; and,

- 87 ▪ The Company should be authorized to functionalize general and intangible
88 plant related to Advanced Meter Infrastructure ("AMI") Plan Investments
89 as meter-related in its ECOSS.

90 **Q. Please summarize the results of these modifications to the ECOSS:**

91 A. Table 1 below provides the overall effects of the modified ECOSS:

Table 1				
AIC Net Revenue Requirement				
<u>Class</u>	<u>13-0301</u>	<u>Modified</u>	<u>Difference</u>	<u>%</u>
DS-1	\$ 437,342,638	\$ 418,360,805	\$ (18,981,833)	-4.34%
DS-2	\$ 126,929,447	\$ 147,554,624	\$ 20,625,178	16.25%
DS-3	\$ 72,959,049	\$ 66,911,236	\$ (6,047,813)	-8.29%
DS-4	\$ 68,708,125	\$ 70,807,741	\$ 2,099,616	3.06%
DS-5	\$ 22,264,877	\$ 24,569,729	\$ 2,304,852	10.35%
Total	\$ 728,204,136	\$ 728,204,135	\$ -	0.00%

92

93 **Q. Please summarize your recommended modifications to the Company's rate design.**

94 A. I recommend that:

- 95 • The rate design methodology presented herein provides a fair and reasonable
96 departure from the methodology currently utilized for Rate MAP-P price
97 development and should be approved by the Commission. This methodology
98 includes the addition of a new rate class, DS-6 - Temperature Sensitive Delivery
99 Service.

100 **Q. Please identify the overall results of the Company's rate design.**

101 A. Ameren witness Jones performs the revenue allocation calculations, which become the
102 target revenue requirements for each rate class. Please see Ameren Exhibit 1.2 attached to the
103 direct testimony of Mr. Jones for a summary of the mitigated revenue requirements for each rate

104 class. For a comparison of prices proposed in Docket No. 13-0301, and those that result from
105 applying the methodology proposed in this proceeding, please see Ameren Exhibit 2.7.

106 **II. COST OF SERVICE STUDIES**

107 **A. Discussion of Currently-Approved Cost of Service Methodology**

108 **Q. Please discuss the currently-approved cost of service methodology.**

109 A. The currently-approved cost of service methodology was derived from Docket No. 09-
110 0306(cons.) and further utilized in Docket Nos. 12-0001, 12-0293, and 13-0301(pending). For
111 further discussion of this methodology, please see Ameren Exhibit 2.1, which is an excerpt from
112 Ameren Exhibit 7.0 presented in Docket No. 13-0301(pending).

113 **Q. Are you proposing any modifications to the currently-approved cost of service**
114 **study methodology?**

115 A. Yes. I am proposing certain modifications to the ECOSS.

116 **Q. When will these modifications be used in the process of setting delivery service**
117 **rates?**

118 A. The modified ECOSS approved in this proceeding will be used to set delivery service
119 rates in future MAP-P update filings. I anticipate the first opportunity to utilize this new cost of
120 service methodology to set rates will be in the 2014 MAP-P update, which will be filed on or
121 before May 1, 2014. For a further discussion regarding implementation of changes resulting
122 from this proceeding, please see the direct testimony of Ameren witness Jones.

123 **B. Discussion of Proposed Modifications to ECOSS**

124 **Q. Please explain the modifications to the ECOSS.**

125 A. The Company is proposing four (4) modifications to the ECOSS that affect the cost
126 allocations to the delivery service rate classes¹:

- 127 1. Supply Voltage and Service Voltage Recognition;
- 128 2. Primary Distribution Line Allocator;
- 129 3. Functionalization of Overhead Distribution Lines; and
- 130 4. Advanced Meter Infrastructure ("AMI") Investment.

131 I discuss in further detail below these proposed ECOSS modifications and I model the
132 cumulative effects of these modifications and present the results of the modified ECOSS.

133 **1. Supply Voltage and Service Voltage Recognition**

134 **Q. Please explain Supply Voltage and Service Voltage Recognition.**

135 A. AIC prepares class demands at various voltage levels for use in the ECOSS allocations.
136 The purpose of doing so is to determine the collective demand of all customers within each rate
137 class, and ultimately each class's relative contribution to the total system demand at each voltage
138 level (secondary, primary, high voltage, etc.) of the distribution system. This representation of
139 class demand and relative contribution at each voltage level is a very basic cost of service
140 principle, but a very important one. In Docket No. 09-0306 (cons.), AIC was ordered to allocate
141 distribution plant using supply voltage only (not service voltage) unless AIC could provide more
142 persuasive evidence in a future proceeding. This failure to recognize both supply voltage and
143 service voltage resulted in illogical and inappropriate allocations of costs.

144 **Q. Was this issue further addressed in another proceeding?**

¹ I am also proposing two "cosmetic" changes that do not affect cost allocations. In specific, I have relabeled "subtransmission" throughout the ECOSS to "High Voltage Distribution" and have also relabeled "transmission" to "+100kV Distribution". The new labels are consistent with the current rate structure and tariffs, therefore more appropriate than existing terminology within the ECOSS.

145 A. Yes. This same issue was further addressed in AIC's subsequent general rate case,
146 docketed as Docket No. 11-0279. In that proceeding, I provided evidence (testimony and
147 exhibits) supporting AIC's position on the issue.

148 **Q. Was your position on this topic supported by all parties in Docket No. 11-0279?**

149 A. Yes. In Docket No. 11-0279, the Administrative Law Judge issued a Proposed Order,
150 dated November 15, 2011, which, if approved, would have resulted in implementation of the cost
151 allocation approach the Company is now again proposing. Specifically, in discussing this
152 "Resolved Issue", the Proposed Order noted as follows:

153 In Docket Nos. 09-0306 et al., the Commission directed AIC to use supply
154 voltage as the allocator of distribution assets to DS-4 customers in future electric
155 rate filings unless more persuasive evidence was provided. (Apr. 29, 2010 Order
156 at 232) The issue concerned the appropriate allocation of distribution assets to
157 DS-4 customers with a supply voltage of +100 kV and above. In this proceeding,
158 AIC proposes a new cost allocation approach using supply voltage and service
159 voltage designations. "Supply voltage" is the voltage level of distribution
160 facilities connecting a customer's load before final transformation. "Service
161 voltage" is the final voltage at the point at which a customer utilizes AIC assets
162 and connects to their assets. In preparing its rate filing, AIC created supply
163 voltage subclasses in its electric COSS for the DS-3 and DS-4 classes. The class
164 demand at each class' service voltage becomes the appropriate allocator. This
165 approach further refines AIC's electric COSS and leads to a more transparent and
166 accurate allocation of costs at the subclass level. No party has proposed a different
167 allocator or recommended that AIC continue to allocate assets based solely on
168 supply voltage. The Commission accepts AIC's cost allocation approach using
169 supply and service voltage designations as used in AIC's COSS.

170
171 Proposed Order, p. 147, Docket No. 11-0279 (November 15, 2011).

172 **Q. Why then was this cost allocation approach not utilized for purposes of setting**
173 **delivery service rates?**

174 A. Docket No. 11-0279 was terminated prior to issuance of a Final Order. As a result, under
175 the then-newly-enacted Energy Infrastructure Modernization Act ("EIMA"), the Company

176 continued its operations under the rate design methodologies approved in the previous case,
177 docketed as Docket No. 09-0306 (cons).

178 **Q. Can you provide additional detail around this issue?**

179 A. Yes. Please see Ameren Exhibit 2.2, which is incorporated by reference herein and
180 presents the relevant pages of my direct testimony from Docket No. 11-0279 further explaining
181 the issue.

182 **Q. What is your recommendation related to Supply Voltage and Service Voltage?**

183 A. I am simply seeking to reinstate the result of what was a resolved issue in Docket No. 11-
184 0279. In doing so, I recommend that AIC recognize both the supply voltage and service voltage
185 when allocating demand-related distribution plant.

186 **2. Primary Distribution Line Allocator**

187 **Q. What is the current method used to allocate the cost of primary distribution lines to**
188 **the delivery service classes?**

189 A. Currently, AIC allocates gross distribution plant associated with primary distribution
190 lines² using a Coincident Peak ("CP") Demand allocator. In other words, the amount of primary
191 distribution line plant cost allocated to each delivery service rate class is proportionate to the
192 class's contribution, if any, at the time of the Company's annual single hour system peak
193 demand.

194 **Q. What is your proposed method to allocate the cost of primary distribution lines to**
195 **the delivery service classes?**

² 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.

196 A. I propose the cost of gross distribution plant associated with primary distribution lines be
197 allocated to each class using a Non-Coincident Peak ("NCP") Demand allocator. The NCP
198 Demand is the single highest hourly aggregate demand at the time of peak for only those
199 customers within each rate class, regardless of the time of AIC's overall system peak demand.

200 **Q. Which method has AIC historically utilized to allocate primary lines and substation**
201 **plant?**

202 A. Prior to Docket No. 09-0306 (cons.), AIC used NCP Demand.

203 **Q. Does AIC's current methodologies allocate any distribution costs using an NCP**
204 **Demand?**

205 A. Yes. The ICC has approved use of an NCP Demand for purposes of allocating the cost of
206 secondary distribution lines (less than 600 Volts).

207 **Q. In Docket No. 09-0306 (cons.), the ICC approved the use of a CP Demand to**
208 **allocate the costs of substations and primary lines. Do you find this inappropriate?**

209 A. I take no exception in this proceeding to the allocation factor used for substations;
210 however, I do believe the NCP Demand allocator is more appropriate than the CP Demand
211 allocator for primary distribution lines.

212 **Q. Which parties took interest in this issue in Docket No. 09-0306(cons.)?**

213 A. The parties that voiced their opinions on the issue were the Staff of the Illinois
214 Commerce Commission ("Staff"), the Illinois Industrial Energy Consortium ("IIEC"), the Grain
215 and Feed Association ("GFA"), and Ameren Illinois. All of these parties except Staff were
216 supportive of AIC's continued practice of using NCP Demand to allocate primary distribution
217 lines and substations.

218 **Q. What were Staff's concerns in opposing the use of an NCP Demand allocator for**
219 **allocating the cost of primary distribution lines and substations?**

220 A. Staff had several concerns: 1) Staff stated that primary distribution lines and substations
221 are constructed to meet the collective demands of multiple rate classes. As such, they claimed a
222 CP Demand more accurately reflects how these costs are incurred; 2) Staff asserted that the DS-
223 5 lighting class illustrates the shortcomings of an NCP Demand. They claimed the DS-5 class is
224 penalized because NCP Demand would use the full off peak demand to allocate costs, but these
225 demands do not drive the cost of constructing substations and primary lines; and, 3) Staff was
226 also not persuaded by AIC's example that grain drying customers peak during the off peak fall
227 season and that the CP Demand fails to recognize heavy usage of primary lines and substations
228 that peak during that fall grain drying season. Staff criticized this example because the grain
229 drying customers did not constitute a separate rate class in the cost of service study. See Final
230 Order, pp. 232-234, Docket No. 09-0306 (cons.) (April 29, 2010).

231 **Q. How do you respond to Staff's concern that primary lines and substations are**
232 **constructed to meet the demands of multiple classes?**

233 A. In Docket No. 09-0306 (cons.) Staff stated that primary distribution lines and substations
234 are built to serve multiple rate classes. While this is correct in some cases, it is also incorrect in
235 other cases. Table 2 below shows the number of rate classes served by AIC's primary
236 distribution lines ("feeders" or "primary lines"). Note that 304 out of 2,533, or 12% of the
237 feeders, serve a single class of customers, while only 63 out of 2,533 or 2% of the feeders, serve
238 all rate class.

239

240

Table 2

# of Classes Served	# of feeders	Percentage
1	304	12%
2	619	24%
3	1,010	40%
4	537	21%
5	63	2%
Total	2,533	100%

241

242 **Q. Is it appropriate to group substations and primary distribution lines together for**
243 **purposes of determining an allocation factor?**

244 A. No. The CP Demand method argument presented by Staff is more appropriate for
245 substations than primary distribution lines. Distribution substations typically supply multiple
246 feeders, while, as illustrated above, many feeders in AIC's distribution system serve single
247 classes of customers (see Table 2). Therefore, there is less load diversity at the feeder level than
248 the substation level. For this reason, it is appropriate to use an allocation method that recognizes
249 the fact that the cost of constructing primary distribution lines correlates more closely with the
250 class's NCP Demand than the CP Demand in these situations. While prior debate on this issue
251 groups substations and primary lines together for purposes of determining the allocation factor,
252 separating them in this discussion is more appropriate. This approach provides a balance
253 between Staff's concerns and the positions of the other parties involved in Docket No. 09-0306
254 (cons.).

255 **Q. How do you respond to Staff's concern regarding the DS-5 lighting class?**

256 A. AIC continues to disagree with the position previously presented by Staff on this issue.
257 Under the currently-approved CP Demand method, the DS-5 lighting class fails to receive a

258 single dollar of the cost of primary distribution lines, due to the fact that the CP Demand is zero
259 during AIC's single hour system peak. It is inappropriate to allocate zero costs of substations
260 and primary distribution lines to a class that uses both of these facilities; therefore, AIC is
261 proposing the balanced approach that allocates zero costs of substations (CP Demand) while
262 allocating an appropriate share of the cost of primary distribution lines to the DS-5 lighting class
263 (NCP Demand). This approach is mindful of Staff's concern that substations are not designed
264 with the demand of street lighting in mind. This approach also recognizes AIC's concern that
265 none of cost of the primary distribution lines is allocated to the lighting class.

266 **Q. How do you respond to Staff's concern that grain drying customers did not**
267 **constitute a separate rate class in the cost of service study?**

268 A. This is no longer a valid argument because AIC is proposing a separate rate class, DS-6
269 Temperature Sensitive Delivery Service, which is expected to be comprised of mostly grain
270 drying customers. The Company's proposal for a new rate is discussed in further detail in a later
271 section of my testimony.

272 **Q. What is your recommendation regarding the primary distribution line allocator?**

273 A. I recommend the ECOSS be modified as proposed herein to allocate the primary
274 distribution line plant cost using the NCP Demand allocator rather than the CP Demand
275 allocator.

276 **3. Functionalization of Overhead Distribution Lines**

277 **Q. Please explain the current methodology used to functionalize overhead distribution**
278 **lines.**

279 A. Currently, FERC Accounts 364-365 (overhead distribution lines), are functionalized to
280 the following voltage levels: Secondary (<600V), Primary (600V-30kV), Distribution High
281 Voltage (30kV-100kV), and +100kV Distribution. The functionalization of overhead
282 distribution line costs involved two stages.

283 Stage 1 identifies +100kV radial distribution line cost for each Rate Zone. A study of
284 Rate Zone III cost data was used to determine a percentage of total overhead distribution line
285 costs as associated with the +100kV Distribution. This percentage, determined from Rate Zone
286 III data, was used as a proxy for all Rate Zones.

287 Stage 2 of the methodology utilized a Replacement Cost New Study ("RCN")³ to
288 functionalize the remaining overhead distribution line costs into voltage categories.

289 **Q. Briefly explain the RCN Study?**

290 A. The RCN Study required two data elements: 1) circuit miles of distribution lines by
291 voltage level and 2) current replacement cost of each. The number of circuit miles of
292 distribution line at each voltage is multiplied by its replacement cost to derive today's cost of
293 replacing all distribution lines. A percentage of total replacement cost of distribution lines at
294 each voltage level then determined; finally, these percentages are applied to AIC's embedded
295 cost of distribution lines to arrive at the functionalized cost at each voltage level.

296 **Q. Please explain your proposed modification to functionalization overhead**
297 **distribution lines.**

³ RCN Study in the current method is proposed to operate in the same manner as the proposed method. The only difference is the proposed method includes the +100kV distribution lines in the analysis.

298 A. The proposed functionalization methodology will have only one stage. The proposed
299 methodology will incorporate all voltage categories of overhead distribution lines into the RCN
300 Study. In other words, I propose to eliminate Stage 1 and to perform only Stage 2.

301 **Q. Why does the proposed method provide for a better functionalization of costs?**

302 A. The proposed method relies on actual data for all Rate Zones and is also a more internally
303 consistent.

304 **Q. Are you proposing a different cost allocation method to go along with the re-**
305 **functionalized distribution line cost?**

306 A. No. I am only proposing a different method to functionalization the costs of overhead
307 distribution lines. Each rate class will continue to be allocated their share of those costs based on
308 the currently approved allocation factor.

309 **4. Advanced Meter Infrastructure ("AMI") Plan Investment**

310 **Q. What is your proposal related to AMI Plan investments?**

311 A. AIC's General and Intangible ("G&I") Plant investments related to the Company's AMI
312 Plan should be allocated differently than the remaining G&I Plant within the ECOSS. I propose
313 these AMI Plan investments be allocated using a customer-related allocator instead of the current
314 labor-related allocator. Further, these plant investments should be allocated to the delivery
315 service rate classes using the same allocation factor approved for FERC Account 370 - Meters.
316 This modification captures the effects of the AMI Plan's costs and benefits; namely, that the
317 AMI Plan will require substantial investment in meters and meter-related communication
318 network and software, while providing the benefit of decreased meter reading expenses.

319 **Q. What do you mean when you state that these incremental AMI investments should**
320 **be allocated to the delivery service rate classes using the same allocation factor approved**
321 **for FERC Account 370-Meters?**

322 A. Investments in meters are allocated to the delivery service rate classes using a customer-
323 related allocation factor. Given the fact that this allocation factor is currently approved for cost
324 allocations of meter investments and that these new AMI Plan investments support the metering
325 function, the same allocation factor is appropriate and should be used to allocate the incremental
326 G&I Plant investment related to the AMI Plan.

327 **Q. What is the impact of your proposed AMI Investment modification on cost**
328 **allocations?**

329 A. There is no immediate impact on the cost allocations in the current proceeding because
330 the test year incorporated into this proceeding does not currently include AMI Plan investments.

331 **Q. If there is no impact to the current allocations of G&I Plant, why are you proposing**
332 **a modification to the ECOSS now?**

333 A. The AMI Plan investments will be made over an extended period, beginning in 2014⁴.
334 Under AIC's MAP-P tariff and formula rate process, AIC can only propose modifications to the
335 cost allocation and rate design in separate rate re-design proceedings. Since AIC cannot
336 propose an alternative method in the 2013 update filing, in which AMI Plan investments are
337 expected to be included, it is important that this modification to the ECOSS model be authorized
338 in this proceeding.

⁴ The first AMI meter ("golden meter") is expected to be installed sometime around June 2014. As such, G&I Plant investments related to the AMI Plan are not expected to be included rate base until the 2014 test year, which would be included in AIC's 2013 formula rate update filing.

339 **C. Results of Cost of Service Studies**

340 **Q. What are the Delivery Service Classes used in your ECOSS?**

341 A. The rate classifications of DS-1 (Residential Delivery Service); DS-2 (Small General
342 Delivery Service); DS-3 (General Delivery Service); DS-4 (Large General Delivery Service);
343 DS-5 (Lighting Service); and DS-6 (Temperature Sensitive Delivery Service) are the basis for
344 my study. DS-3 and DS-4 has each been further split into three subclasses, differentiated by
345 supply voltage: +100 kV, High Voltage, and Primary. DS-6 is comprised of former DS-3 and
346 DS-4 customers. As such, the DS-6 class has been split into six subclasses differentiated by
347 supply voltage and whether the customer was formerly DS-3 or DS-4.

348 **Q. Please summarize the results of the modified ECOSS.**

349 A. The results of the modified ECOSS are summarized in Ameren Exhibits 2.3-2.5.
350 Ameren Exhibit 2.3 contains, for each Rate Zone and each delivery service class, the revenue
351 required to allow AIC to earn an equal rate of return for each delivery service class. Ameren
352 Exhibit 2.3 also shows the corresponding rate base components and expenses under this
353 equalized rate of return for each delivery service class. Ameren Exhibit 2.3 does not include the
354 2012 reconciliation amount.

355 Ameren Exhibit 2.4 contains, for each Rate Zone and each delivery service class, the
356 unbundled revenue requirement components necessary for AIC to earn the equalized rate of
357 return shown in Exhibit 2.3 for each delivery service class. Unbundled revenue requirement
358 components include, among others, categories such as Distribution, Services, Meters, Customer
359 Service, etc. Ameren Exhibit 2.4 also does not include the 2012 reconciliation amount.

360 Ameren Exhibit 2.5 shows, for each Rate Zone and delivery service class, the net revenue
361 requirement necessary to recover AIC's allowed revenue requirement per the performance based

362 formula rate, as provided in the supplemental direct filing of Docket No. 13-0301. The net
363 revenue requirement shown in Ameren Exhibit 2.5 does include the reconciliation amount.

364 **Q. Have you modified the allocation method of the reconciliation amount in this**
365 **proceeding?**

366 A. Yes. In Docket No. 13-0301 the unbundled energy-related cost component, comprised
367 solely of the Electric Distribution Tax, was allocated a portion of the reconciliation amount.
368 Consistent with Ameren witness Jones's proposal to recover the actual amount of Distribution
369 Tax paid to the state, the portion of the reconciliation amount previously allocated to Electric
370 Distribution Tax expense will no longer be allocated to this unbundled cost component; instead,
371 the reconciliation amount will only be allocated to the customer-related and demand-related cost
372 components.

373 **Q. How does revenue requirement by rate class from the modified ECOSS compare to**
374 **revenue requirement by rate class from the ECOSS presented in Docket No. 13-0301?**

375 A. Table 3 below provides a summary of the comparison. Please see Ameren Exhibit 2.6 for
376 detailed revenue requirement by class from Docket No. 13-0301. Ameren Exhibit 2.5, discussed
377 earlier in my testimony, contains comparable information for the current proceeding. These two
378 exhibits contain the detailed subclass information used to develop Table 3. Since AIC proposed
379 a new rate in this proceeding (DS-6), Table 3 shows the DS-6 class's customers combined with
380 their otherwise applicable rate class (DS-3 or DS-4) in order to show the impact to existing
381 delivery service rate classes. The column labeled "13-0301" presents the class revenue
382 requirements by class in Docket No. 13-0301, while the "Modified" column presents the class
383 revenue requirements resulting from modifications from this proceeding.

384

Table 3

Net Revenue Requirement				
	<u>13-0301</u>	<u>Modified</u>	<u>Difference</u>	<u>Percent</u>
Rate Zone I				
DS-1	\$ 120,537,965	\$ 121,538,414	\$ 1,000,449	0.83%
DS-2	\$ 46,341,286	\$ 56,291,557	\$ 9,950,271	21.47%
DS-3	\$ 22,528,258	\$ 21,866,394	\$ (661,864)	-2.94%
DS-4	\$ 22,911,168	\$ 24,528,828	\$ 1,617,660	7.06%
DS-5	\$ 4,706,394	\$ 5,777,129	\$ 1,070,734	22.75%
	\$ 217,025,071	\$ 230,002,322	\$ 12,977,251	5.98%
Rate Zone II				
DS-1	\$ 78,858,992	\$ 70,607,005	\$ (8,251,987)	-10.46%
DS-2	\$ 19,245,977	\$ 21,224,532	\$ 1,978,554	10.28%
DS-3	\$ 12,925,368	\$ 10,907,838	\$ (2,017,530)	-15.61%
DS-4	\$ 11,160,336	\$ 9,388,283	\$ (1,772,054)	-15.88%
DS-5	\$ 2,640,426	\$ 2,479,434	\$ (160,992)	-6.10%
	\$ 124,831,099	\$ 114,607,091	\$ (10,224,009)	-8.19%
Rate Zone III				
DS-1	\$ 237,945,682	\$ 226,215,386	\$ (11,730,295)	-4.93%
DS-2	\$ 61,342,183	\$ 70,038,536	\$ 8,696,352	14.18%
DS-3	\$ 37,505,423	\$ 34,137,004	\$ (3,368,419)	-8.98%
DS-4	\$ 34,636,621	\$ 36,890,630	\$ 2,254,009	6.51%
DS-5	\$ 14,918,057	\$ 16,313,166	\$ 1,395,110	9.35%
	\$ 386,347,966	\$ 383,594,723	\$ (2,753,243)	-0.71%
AIC				
DS-1	\$ 437,342,638	\$ 418,360,805	\$ (18,981,833)	-4.34%
DS-2	\$ 126,929,447	\$ 147,554,624	\$ 20,625,178	16.25%
DS-3	\$ 72,959,049	\$ 66,911,236	\$ (6,047,813)	-8.29%
DS-4	\$ 68,708,125	\$ 70,807,741	\$ 2,099,616	3.06%
DS-5	\$ 22,264,877	\$ 24,569,729	\$ 2,304,852	10.35%
	\$ 728,204,136	\$ 728,204,135	\$ -	0.00%

385

386 **III. RATE DESIGN**

387 **A. Delivery Service Charges – Rate MAP-P Pricing Development**

388 **Q. What is your main objective for rate design and pricing development?**

389 A. I have two primary objectives: 1) modify certain components of the rate design
390 methodology, and 2) incorporate a new rate, DS-6 Temperature Sensitive Delivery Service, into
391 the Company's approved rate design methodology. First, I will explain aspects AIC's rate design
392 methodology proposal, then I will describe AIC's proposal for a new rate, DS-6 Temperature
393 Sensitive Delivery Service.

394 **Q. Can you provide a summary the overall rate design methodology?**

395 A. Yes. Ameren Exhibit 1.1, presented by Ameren witness Jones, contains a summary of
396 AIC's entire revenue allocation, mitigation and rate design methodology. I discuss the rationale
397 of certain rate design proposals in further detail below.

398 **Q. What steps were followed to develop the proposed pricing update?**

399 A. AIC followed a three step process in developing the current pricing methodology. First,
400 AIC developed the ECOSS, which included proposed modifications discussed above and those
401 addressed by Ameren witness Martin. ECOSS results also include the modified allocation
402 method of the reconciliation amount for each Rate Zone as shown in Ameren Exhibit 2.5.
403 Second, a revenue allocation process, as explained in detail by Ameren witness Jones, was used
404 to determine the revenue responsibility for each class within each Rate Zone. Third, the
405 Company adjusted individual charge components for each Delivery Service Rate following the
406 rate design methodology outlined in Ameren Exhibit 1.1.

407 **Q. Does AIC develop separate prices by Rate Zone?**

408 A. Yes. AIC continues to develop separate prices for each Rate Zone. Consistent with the
409 outcome in Docket No. 09-0306 (cons.), several charges are uniform, and will remain uniform

410 among the Rate Zones (i.e., Customer, Meter, Transformation⁵, and Reactive Demand Charges).
411 Continued movement towards uniformity among rates is discussed in more detail in the direct
412 testimony of Ameren witness Jones.

413 **B. Pricing**

414 **Q. How do the prices presented in this proceeding compare to the prices developed**
415 **under the currently-approved cost allocation and rate design methodology presented in**
416 **Docket No. 13-0301?**

417 A. Please see Ameren Exhibit 2.7. Ameren Exhibit 2.7 contains two sets of delivery service
418 charges for each Rate Zone. Both sets of prices produce the same amount of total delivery
419 service revenue for Ameren Illinois. The "13-0301" column represents rates developed in
420 Docket No. 13-0301, while the "Redesign" column represents rates consistent with modifications
421 made in this proceeding.

422 **Q. How did you develop the Meter Charges in this proceeding?**

423 A. Meter Charges are currently uniform among Rate Zones and will remain uniform. Meter
424 Charges for each rate class were set to recover the overall total class meter service revenue
425 requirement as determined by the ECOSS for Ameren Illinois. Price differentiation between
426 meter voltage categories was determined by examining the relative difference between
427 replacement costs for each respective meter voltage category. For purposes of determining
428 meter charges for the DS-3 and DS-4 classes, meter service revenue requirement from the DS-6
429 class was included in the otherwise applicable rate class, DS-3 or DS-4. The DS-5 Meter
430 Charges were set equal to those in the DS-2 class, which is not different than the current

⁵ Except Rate Zone II, DS-4 +100kV subclass.

431 methodology. For further information, see Ameren Exhibit 2.8 for Meter Charge development
432 for each class.

433 **Q. How have you developed Customer Charges?**

434 A. Please see Ameren Exhibit 2.8 for Customer Charge development. The methodology to
435 develop Customer Charges differs by rate class; however, Customer Charges among Rate Zones
436 are currently uniform and will remain uniform. The DS-1 and DS-2 class's Customer Charges
437 were developed with a Straight Fixed Variable ("SFV") rate design; meaning that the Company
438 will design rates to recover a fixed percentage of class revenue requirement from the monthly
439 non-volumetric (kWh) charges. The remaining rate class's Customer Charges will be based on
440 other cost-based targets further explained below.

441 **Q. What SFV percentage was targeted to develop Customer Charges for DS-1 and DS-
442 2 in this proceeding?**

443 A. Customer Charges for DS-1 and DS-2 were developed with the goal of achieving fifty
444 percent (50%) revenue recovery through the fixed bill components⁶. Customer Charges and
445 Meter Charges (non-volumetric) are the fixed bill components considered in the 50% SFV rate
446 design target. In an effort to apply the concept of gradualism, movement towards the 50% target
447 will be limited to no more than 2.5 percentage points (2.5%) more than recovery levels of current
448 rates. Once the 50% SFV rate design target is achieved, it will remain. The remaining delivery
449 service revenue requirement for these classes will be collected through volumetric Distribution
450 Delivery Charges ("DDC") and Electric Distribution Taxes ("EDT").

451 **Q. Why have you chosen 50% as the target?**

⁶ 50% target excludes EDT from the calculation.

452 A. This target represents a modest movement towards a higher SFV percentage, given AIC's
453 current levels. Also, Commonwealth Edison was approved a 50% SFV rate design for
454 residential and non-residential customers in the Watt-Hour Delivery Class⁷.

455 **Q. What are the current SFV recovery levels from the DS-1 and DS-2 rate classes?**

456 A. The percentages are 44.8% and 27.2% for DS-1 and DS-2, respectively.

457 **Q. Was Ameren Illinois able to achieve the 50% target in this proceeding?**

458 A. No. Due to the 2.5% limitation discussed above, the SFV percentages used to set rates
459 for DS-1 and DS-2 in this proceeding were limited to 47.3% and 29.7%, respectively.

460 **Q. How were DS-2 Non-Secondary Customer Charges developed?**

461 A. DS-2 Non-Secondary Customer Charges were set to the overall DS-2 delivery service
462 revenue change for Ameren Illinois, not to exceed the primary meter charge developed for DS-3,
463 DS-4, and DS-6.

464 **Q. How were Customer Charges developed for the DS-5 rate class?**

465 A. AIC is not proposing to change the method used to develop Customer Charges for the
466 DS-5 class; therefore, Customer Charges for DS-5 will continue to be set equal to the price
467 developed for DS-2.

468 **Q. How were Customer Charges developed for the DS-3, DS-4, and DS-6 rate classes?**

469 A. Customer Charges for DS-3, DS-4, and DS-6 are currently equal among rate classes, but
470 differ by voltage category. Customer Charges for these rate classes will continue to be equal
471 among Rate Zones and were set to recover the overall total meter service revenue requirement as

⁷ See Final Order, Docket No. 10-0467 (May 24, 2011), p. 232.

472 determined in the ECOSS for the three classes combined⁸. Price differentiation between
473 “Secondary”, “Primary”, “High Voltage”, and “+100 kV” voltage categories were determined by
474 examining the relative difference between replacement costs of current and potential
475 transformers used for each respective voltage category.

476 **Q. What is the proposed method to develop transformation and reactive demand**
477 **charges?**

478 A. Transformation and Reactive Demand Charges will be set equal to the prices approved in
479 Docket No. 13-0301, with the exception of the Rate Zone II Transformation Charge. This
480 subclass of customers has been directly assigned substation plant costs; therefore, the
481 Transformation Charge for this subclass had to be lowered to \$0.15 per kW. Transformation
482 service at this lower price is only applicable to existing customers (as of 12/31/2012) in the
483 subclass with existing facilities. New customers requesting service or existing customers
484 requesting additional transformation service or modification of existing facilities will not be
485 eligible for this lower pricing.

486 **Q. How does AIC propose to adjust Distribution Delivery Charges for the rate classes?**

487 A. Distribution Delivery Charges are the last charges developed in the sequence of charge
488 adjustments, as summarized in Ameren Exhibit 1.1. Customer, Meter, Transformation, and
489 Reactive Demand Charges have been adjusted as explained earlier in my testimony. Ameren
490 witness Jones discusses pricing adjustments for the DS-5 class, DS-3 +100 kV and DS-4 +100
491 kV subclasses, and the EDT for all rate classes. The remaining charges that must be adjusted in
492 order to achieve the revenue requirement targets are the DDC for DS-1, DS-2, DS-3 (except

⁸ Meter Charges for the DS-3, DS-4, and DS-6 classes were rounded.

493 +100kV), and DS-4 (except +100kV). AIC has determined the DDC for the remaining classes
494 by adjusting current charges by equal percentage amounts sufficient to reach the applicable
495 revenue requirement target for each class or subclass.

496 **C. DS-6 Temperature Sensitive Delivery Service**

497 **Q. Why has Ameren Illinois proposed a new electric tariff, DS-6 Temperature**
498 **Sensitive Delivery Service?**

499 A. In the Proposed Order in Docket No. 11-0279 (issued November 15, 2011), AIC was
500 directed to conduct workshops with GFA on the issue of seasonally differentiated rates for the
501 DS-3 and DS-4 classes. Proposed Order, p. 210, Docket No. 11-0279 (November 15, 2011).
502 Although Docket No. 11-0279 was terminated prior to issuance of a final order, the intent of the
503 Proposed Order was preserved by AIC and GFA in continuing discussions aimed at identifying a
504 workable solution on the issue. AIC first met with members of GFA to discuss this issue on
505 February 19, 2013. AIC followed up with emails, phone conversations, and another face-to-face
506 meeting on May 1, 2013. These workshops provided both parties valuable information and, in
507 large part, resulted in the idea of a new, standalone delivery service tariff offering. The new DS-
508 6 tariff is presented in Ameren Exhibit 2.9.

509 **Q. What is the purpose of DS-6?**

510 A. The purpose of this tariff is to provide an optional delivery service to existing DS-3 and
511 DS-4 Customers who can reduce their electrical demand in a meaningful way that provides
512 distribution system benefits for the Company. Customers who take service under this rate should
513 be able reduce their demand for electricity during On-Peak hours on days when the temperature
514 is relatively higher than other days of the year.

515 **Q. How will the DS-6 tariff generally operate?**

516 A. As an optional delivery service option, a customer who elects to take service under DS-6
517 must notify the Company by May 1 for service to begin the following June Billing Period. Each
518 customer taking service under this tariff will be assigned a Delivery Allowance. The Delivery
519 Allowance is an amount of demand, in kilowatts, that the tariff allows an individual customer to
520 impose on the distribution system during On-Peak hours on days when the day-ahead forecast
521 average temperature is equal to or above 70 degrees Fahrenheit. A customer on this tariff will
522 receive the distribution delivery charge each month based on the predetermined Delivery
523 Allowance; a customer must also remain on this tariff for a minimum of twelve months. If the
524 customer exceeds the Delivery Allowance in a billing period during On-Peak hours on days
525 when the day-ahead forecast average temperature is equal to or above 70 degrees Fahrenheit,
526 then the customer will be subject to an Excess Demand Charge for that billing period, as
527 described later in my testimony.

528 **Q. Will DS-6 replace rate limiter provision of DS3 and DS4?**

529 A. Yes. Once this new rate becomes effective, DS-3 and DS-4 customers will no longer be
530 eligible to receive rate limiter credits, and the provision for such credits will be removed from
531 the DS-3 and DS-4 tariffs.

532 **Q. How has AIC determined which customers constitute the DS-6 class in this**
533 **proceeding?**

534 A. The customers included in the DS-6 class take service under the DS-3 or DS-4 tariff
535 during the 2012 test year and have received at least one rate limiter bill credit per year in at least
536 3 out of the past 4 years (2009-2012).

537 **Q. How is the DS-6 tariff structured?**

538 A. By and large, the tariff is structured similar to the DS-3 tariff. As such, the tariff includes
539 a Customer Charge, Meter Charge, Transformation Charge, Distribution Delivery Charge
540 (“DDC”), and Excess Demand Charge (“EDC”).

541 **Q. How will these charges be assessed?**

542 A. Customer, Meter, and Transformation charges will be assessed at the otherwise
543 applicable DS-3 or DS-4 charges. The other charges are explained below.

544 **Q. Please explain how the DDC for the DS-6 class will be applied to a customer’s**
545 **monthly usage.**

546 A. The DDC will be multiplied each month by the individual customer’s predetermined
547 Delivery Allowance. The Delivery Allowance is fixed for twelve months and is derived by
548 taking the average of highest monthly demands experienced by the customer during the latest
549 February and March billing periods available. The Delivery Allowance for an individual
550 Customer shall not be greater than 25% of the Customer’s highest monthly Demand experienced
551 in the past twelve months.

552 **Q. Why has AIC chosen the February and March billing periods to calculate the**
553 **Delivery Allowance?**

554 A. GFA has informed AIC through discussions at workshops that their members generally
555 do not dry grain between the February and April billing periods; therefore, this time period
556 serves as a reasonable estimate of base-load usage. AIC chose not to include the April billing
557 period to ensure that customers have the complete billing history necessary to determine the
558 Delivery Allowance and make an informed decision by the May 1 enrollment deadline.

559 **Q. Why has AIC decided to limit the Delivery Allowance to 25% of the customer's**
560 **highest monthly demand experienced in the past 12 months?**

561 A. The purpose of the rate is to limit kW of demand on AIC's distribution system for this
562 class during the On Peak times of the year. The 25% provision allows customers who have
563 flexibility in their operations, yet higher demands during February or March, to take service
564 under this tariff.

565 **Q. What are considered On-Peak hours of the day under the DS-6?**

566 A. On-Peak hours are 10 A.M. until 10 P.M. (Central Prevailing Time), Monday through
567 Friday, except certain holidays as defined in the Company's Customer Terms and Conditions
568 (Ill. C. C. No. 1, 1st Revised Sheet No. 3.009).

569 **Q. Please explain the Excess Demand Charge applicable to the DS-6 class?**

570 A. The EDC will only be applied during a billing period when a customer fails to reduce
571 demand equal to or below the Delivery Allowance during On-Peak hours on days when the
572 forecast day-ahead average temperature is equal to 70 degrees or higher; otherwise, the charge
573 will be zero. The EDC will have two tiers, Tier 1 and Tier 2. The Excess Demand Charge, if
574 applicable, will be the greater of 1) Tier 1 Excess Demand Charge multiplied by each kW of Tier
575 1 Excess Demand, or 2) Tier 2 Excess Demand Charge multiplied by each kW of Tier 2 Excess
576 Demand.

577 **Q. Please explain Tier 1.**

578 A. Tier 1 is applicable on days when the average temperature is equal to or greater than 70
579 degrees but less than 78 degrees Fahrenheit. A Tier 1 Demand will be registered during On-Peak
580 hours on all days in the current billing period when average temperature for the day is in this

581 range. A Tier 1 Excess Demand will be calculated at the Customer's highest Tier 1 Demand
582 registered during the current billing period, if any, less Customer's Delivery Allowance. In no
583 circumstance shall a Tier 1 Excess Demand be less than zero.

584 **Q. How did you determine 70 degrees Fahrenheit as the initial threshold of Excess**
585 **Demand Charges?**

586 A. The initial threshold, 70 degrees, is consistent with temperatures at which AIC typically
587 experiences increased electric demand due to air conditioning loads, which is a major contributor
588 to AIC's annual system peak; therefore, 70 degrees is appropriate for Tier 1 Demand.

589 **Q. Please explain Tier 2.**

590 A. Tier 2 is applicable on days when the average temperature is greater than or equal to 78
591 degrees. A Tier 2 Demand will be registered during On-Peak hours on all days in the current
592 billing period when average temperature for the day is at this level. A Tier 2 Excess Demand
593 will be calculated at the Customer's highest Tier 2 Demand registered during the current billing
594 period, if any, less Customer's Delivery Allowance. In no circumstance shall a Tier 2 Excess
595 Demand be less than zero.

596 **Q. How did you determine 78 degrees Fahrenheit as the threshold for Tier 2?**

597 A. AIC performed a statistical analysis using eleven years of historical system peak data and
598 corresponding temperature data. The statistics used from the analysis were 1) the mean of the
599 average daily temperatures on system peaks days and 2) the standard deviation of that mean.
600 AIC determined that 3 standard deviations from the mean yielded 77 degrees, meaning that
601 approximately 99.7% of the observed system peaks occurred when the average daily temperature
602 is greater than 77.

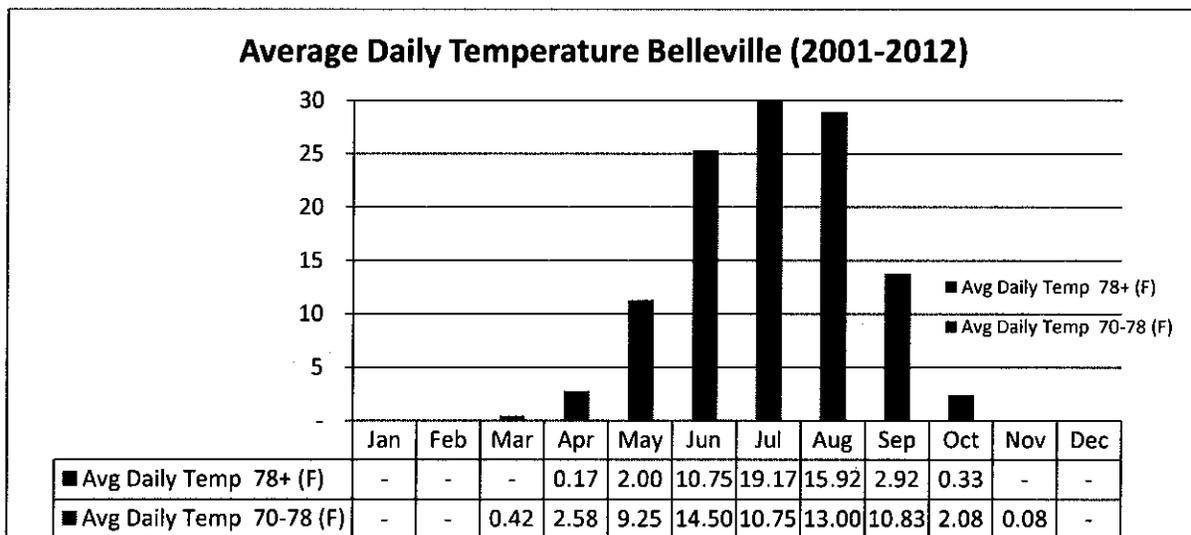
603 **Q. What weather stations will AIC use to determine Tier 1 and Tier 2?**

604 A. Each customer is currently assigned with a weather station that recognizes the difference
 605 in temperature between the geographic regions of AIC’s service territory. The weather stations
 606 currently utilized are Belleville, Marion, Decatur, and Peoria.

607 **Q. Can you provide an indication of the frequency of days and times of the year that**
 608 **will reach Tier 1 and Tier 2 in a typical year?**

609 A. Yes. Chart 1 below shows the historical average number of days in the 12 year period
 610 (2001-2012) when the Belleville weather station experienced average daily temperatures
 611 between 70 and 78 degrees, and greater than or equal to 78 degrees.

612 **Chart 1**



613

614 **Q. Can you provide a real example of how the Excess Demand Charge will function?**

615 A. Yes. Assume a customer has been assigned a Delivery Allowance of 250 kW. On
 616 September 1, the average daily temperate was 76 degrees and the customer decided to operate at
 617 a demand level of 1000 kW during On-Peak hours. The customer registers a Tier 1 Demand for

618 the day of 1000 kW, so the Excess Tier 1 Demand is 750 kW (1000 kW – 250 kW). At the
619 proposed \$13.227 per kW, the Excess Demand Charge would be \$9,920.25 if this was the only
620 occurrence in the billing period where the customer operated above the Delivery Allowance
621 during restricted times. The Customer continues to operate above the Delivery Allowance on the
622 next day, but at a lower demand of 400 kW. The average daily temperature during this day is 77
623 degrees, still in the Tier 1 range. Because this occurred during the same billing period as the
624 previous day, and the Tier 1 Demand registered for the day is less than the previous day, the Tier
625 1 Excess Demand Charge would still be \$9,920.25. The customer continues to operate at 400
626 kW the third day, September 3rd, when the average daily temperature reached 78 degrees. This
627 day is in the Tier 2 range and triggers a Tier 2 Demand. The Tier 2 Excess Demand calculated
628 from this occurrence is 150 kW (400kW – 250kW). At the proposed Tier 2 Excess Demand
629 Charge of \$39.682 per kW, the Excess Demand Charge calculated from this occurrence is
630 \$5,952.30. The customer does not operate above the Delivery Allowance during On-Peak hours
631 for the rest of the billing period. As such, the Excess Demand Charge that would appear on the
632 customer's bill for this September billing period would be \$9,920.25, the higher of the Tier 1
633 Excess Demand Charge and Tier 2 Excess Demand Charge established in the billing period.

634 **Q. Please explain how you arrived at the Tier 1 and Tier 2 Excess Demand Charges?**

635 A. AIC modeled the modified ECOSS under an alternative scenario. The alternative scenario
636 replaced the DS-6 class's CP Demands with the class's NCP Demands; effectively allocating
637 costs to the class under the hypothetical scenario where the DS-6 class peak demand occurs
638 during the Company's overall system peak. The modified ECOSS under the alternative scenario
639 resulted in almost double (84% increase) the cost of serving the DS-6 class. In order to set price
640 signals that recognize this significant cost difference, the Tier 1 Excess Demand Charge has been

641 set to 4 times the Distribution Delivery Charge of the DS-6 class and the Tier 2 Excess Demand
642 Charge has been set to 12 times the Distribution Delivery Charge of the DS-6 class.

643 **Q. How will Excess Demand Charges be set in future MAP-P update filings?**

644 A. AIC will use these multiples of the DS-6 DDC presented above to develop Tier 1 and
645 Tier 2 Excess Demand Charges in future proceedings.

646 **D. Bill Comparisons**

647 **Q. Have you developed bill comparisons resulting from the changes presented in this**
648 **proceeding?**

649 A. Yes. Bill comparisons for the non-lighting rate classes are provided in Ameren Exhibit
650 2.10. Pages 1- 2 provide bill comparisons for a series of residential customers. In particular, the
651 typical⁹ residential customer using 10,000 kWh per year will experience delivery service rate
652 changes of 1.4%, -6.9%, and -5.2%, for Rate Zones I, II, and III respectively. Pages 3-8 show
653 the impact on a series of residential and non-residential customers. Comparisons of the fixture
654 charges in the lighting class can be found on page 8 of Ameren witness Jones's Exhibit 1.3. The
655 impacts reflect changes in delivery service prices from those proposed in Docket No. 13-0301 to
656 those proposed in this proceeding.

657 **IV. PROPOSED TARIFF CHANGES**

658 **Q. You have proposed a new delivery service tariff, DS-6 Temperature Sensitive**
659 **Delivery Service in this proceeding. Are you proposing any other tariff changes?**

⁹ General Use, Non-Space Heating.

660 A. No. However, Ameren witness Jones discusses certain changes to Rate MAP-P tariff and
661 other tariff changes that would be necessary to accommodate the methodology proposed in this
662 proceeding.

663 V. **CONCLUSION**

664 Q. **What is your final recommendation regarding AIC's cost allocation and rate design**
665 **methodology?**

666 A. I recommend the Illinois Commerce Commission approve each of my cost allocation and
667 rate design proposals presented herein and authorize their use in future formula rate update
668 proceedings.

669 Q. **Does this conclude your direct testimony?**

670 A. Yes, it does.

APPENDIX

STATEMENT OF QUALIFICATIONS

RYAN K. SCHONHOFF

I am a graduate of Southern Illinois University at Edwardsville with a Bachelor of Science degree in Electrical Engineering, with a concentration in Power Systems. I also received my Master's Degree in Business Administration from Southern Illinois University at Edwardsville. I was hired upon graduation as an Electrical Engineer by the Association of Illinois Electric Cooperatives where my primary responsibilities included development of Cost of Service Studies, Rate Design, and Long Term Energy Forecasts for member cooperatives. I was employed at the Association until October 2007, during which time I passed the Fundamentals of Engineering exam and became a licensed Engineer Intern in the State of Illinois. I was subsequently hired by Ameren's Corporate Planning Department in November 2007 as a Load Research and Forecast Specialist. From November 2007 through October 2009, I performed various activities for Corporate Planning including Load Research and development of class demands, Electric and Gas Forecasting support, Top Customer Analysis, Bill Impact Analysis/Bill Comparison projects, and a variety of other ad hoc analysis as necessary. I cross trained with the Corporate Financial Modeling group supporting the implementation of a financial model upgrade. In October 2009, I was promoted to Regulatory Consultant in the Regulatory Policy and Rates Department of Ameren's Illinois based regulated business segment, Ameren Illinois Company. I previously testified before the Illinois Commerce Commission in Docket No. 10-0568, regarding gas and electric energy efficiency programs. I have also testified before the Commission in Docket 11-0279 (cons.), regarding Ameren Illinois's electric cost of service study. I have most recently testified in Ameren Illinois's performance based formula

rate, Rate Modernization Action Plan – Pricing (Rate MAP-P), filings in docketed proceedings 12-0001, 12-0293, and 13-0301. In addition, I have testified before the Federal Energy Regulatory Commission in Docket ER11-2777-002 (cons.) on matters of cost of service and ratemaking.