

**ILLINOIS COMMERCE COMMISSION
DOCKET NOS. 06-0070 / 06-0071 / 06-0072 (CONSOLIDATED)**

**SURREBUTTAL TESTIMONY
OF
RAY WIESEHAN**

**Submitted On Behalf
Of
AMEREN COMPANIES**

July 14, 2006

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OF

RAY WIESEHAN

Q. Please state your name and business address.

A. Ray Wiesehan. My business address is 1901 Chouteau Avenue, St. Louis, Missouri 63166.

Q. Are you the same Ray Wiesehan that provided testimony in this proceeding?

A. Yes.

Q. What is the purpose of your testimony?

A. To respond to the rebuttal testimonies provided by Staff witnesses Mr. Jim Spencer and Mr. Greg Rockrohr.

Q. Mr. Spencer states at lines 280 and 281 of his rebuttal testimony, that the Ameren Companies' tree trimming program should be designed to avoid potential hazards associated with trees and electrical conductors. What has been the fatality or injury rate as it relates to the Ameren Companies?

A. Mr. Spencer provided data with respect to fatalities and injuries that have been reported by investor owned utilities to the Staff in the last 20 years. Notably he did not break down the data utility by utility. To my knowledge there have been no fatalities reported for an Ameren Company since the year 2000 due to contact with trees, when the Ameren Companies first began the four year trim cycle,. Also, to my knowledge there was two injuries reported since the year 2000. The

24 incidents occurred in Godfrey, Illinois. and involved AmerenCIPS facilities.
 25 Staff's report on electric accidents is in error. The incidents involved
 26 AmerenCIPS facilities and not AmerenIP. In our report to the Staff on this
 27 incident, we provided pictures that showed the child climbing a tree that was not
 28 in contact with conductors but instead was in contact with CATV and Bell
 29 facilities. The child allegedly claimed injuries due to a fall from the tree after he
 30 sustained an electrical shock This incident occurred on May 12^t, 2005 and was
 31 reported to AmerenCIPS on December 6, of 2005. The second incident involved
 32 the same location and the same tree. In this case the father of the child alleged he
 33 was injured due to an electrical shock on December 24^t 2005. After investigation
 34 of this incident, AmerenCIPS denied the father's claim, finding that the tree was
 35 not in contact with AmerenCIPS facilities nor was there any evidence it had been
 36 in contact with AmerenCIPS' facilities.. I am not aware of any other injuries
 37 reported to Staff by the Ameren Companies involving the general public, utility or
 38 contactor trimming personnel working for the utility, or non utility tree trimmers,
 39 since the four year trim cycle was in effect.

40 **Q. Is the Ameren Company trimming program designed or intended to**
 41 **minimize these potential hazards?**

42 A. Yes. The Ameren Company vegetation management program currently provides
 43 our customers with a distribution system that is maintained on a four year trim
 44 cycle and in compliance with NESC Rule 218, and all other obligations as stated
 45 in 83 Illinois Administrative Code Part 305. Part 305 provides rules that govern
 46 Construction of Electric Power and Communication lines and requires that the

47 utilities provide maximum practical vegetation to conductor clearance considering
 48 the rights of property owners, public and worker safety, electric service reliability,
 49 previous pruning history, tree health, tree aesthetics and efficient work
 50 production. The extent by which individual trees are trimmed is dictated by the
 51 proximity of the tree to the line, the species of tree, the voltage of the line,
 52 construction type found on the property and apparent structural integrity of the
 53 tree. Ameren Companies' written policy also requires contractors to trim trees that
 54 may be readily climbable by children such that they may not be climbed. We
 55 specifically target trees in school yards, parks, customer yards and neighborhood
 56 play grounds. We also ask contractor trimmers to report any tree houses or tree
 57 stands that pose a threat to children or members of the general public .
 58 We also respond to customer and property owner inquiries involving trees that are
 59 close to our facilities. Further, we may provide additional trimming assistance
 60 beyond the scheduled four year trim cycle if a customer or property owner is
 61 removing or having their tree removed by a private tree service. We will trim the
 62 tree to a point that a qualified tree service can safely remove the tree. We do not
 63 charge the tree owner for this service. Members of our staff also participate in
 64 municipal meetings, Illinois Arborist Association meetings and work shops to
 65 inform the general public of the hazards associated with trees and utility
 66 equipment.

67 **Q. Mr. Spencer testifies that Staff has stated its “no contact” position many**
 68 **times prior to its reliability assessments reports for 2004. Are you in**
 69 **agreement ?**

70 A. No. In my testimony I was asked if I concurred with Staff's interpretation of
 71 NESC Rule 218. In my answer I stated that I did not concur. I went on to explain
 72 the Ameren Companies and what I believed to be Staff's interpretation of NESC
 73 Rule 218 and how they differ with respect to the phrase "interfere with". The first
 74 time Staff provided this interpretation of the phrase "interfere with" was in the
 75 memos and attachments associated with the 2003 and 2004 reliability
 76 assessments reports that the Ameren Companies received over a two to three
 77 month time period at the end of 2004. The memos associated with the 2003 and
 78 2004 reliability reports were reviewed in November and December of 2004. These
 79 reports were published and made public at various times in 2005. The language
 80 upon which I rely from the 2004 reliability assessment is as follows: "In addition
 81 to maintaining a four year trim cycle, as AmerenCIPS has committed to do, it also
 82 needs to assure compliance with NESC rule 218. To be in compliance with NESC
 83 rule 218, AmerenCIPS needs to assure that all trees near its lines through out its
 84 service territory are trimmed such that there are no tree contacts with its energized
 85 primary conductors before it returns to trim them again."(emphasis added). In my
 86 view, and I believe the language is self evident, Staff is saying that
 87 vegetation/trees cannot come into contact between trim cycles, which occur every
 88 four years. I can only conclude that Staff was then advocating a "no contact" rule.

89 **Q. But doesn't Mr. Spencer point to earlier documentation in support for his**
 90 **position?**

91 A. Yes, but the documentation is not convincing. I have reviewed again the memos
 92 Mr. Spencer cites in his testimony . In Staff's memo dated November 8, 2002, to

93 AmerenUE I do not see language that gives Staff's interpretation of NESC Rule
 94 218, nor did I see language mentioning Staff's interpretation of NESC Rule 218 in
 95 the September 15, 2003 memo addressing AmerenCILCO's's 2002 reliability
 96 assessment.

97 **Q. Mr. Spencer concludes your statement, that AmerenCILCO does trim to**
 98 **avoid interference between trees and its ungrounded supply conductors, is**
 99 **not true. Can you respond?**

100 A Yes. Mr. Spencer refers to testimony offered by Ameren witness Ronald Stafford
 101 and me. Mr. Spencer claims Mr. Stafford implies that the Ameren Companies do
 102 not now trim to a "no contact zone approach". This is correct—we do not trim to
 103 ensure a no contact zone as Mr. Spencer states. Instead, and correctly so, the
 104 Ameren Companies trim to avoid interference between trees and ungrounded
 105 supply conductors. As I stated in my previous testimony Staff and the Ameren
 106 Companies have different opinions as to the interpretation of the phrase "interfere
 107 with". Staff's position must be that "interfere with" means there can never be
 108 contact between trees and ungrounded supply conductors and the Ameren
 109 Companies' position, as well as the industry standard, is that the phrase "interfere
 110 with" refers to the trees' effect on the ability of the energized conductor to
 111 perform its intended function, which is to safely and reliably distribute electricity.

112 **Q. Do you have any further support for your position that the Ameren**
 113 **Companies trim to avoid interference between trees and ungrounded supply**
 114 **conductors?**

115 A. Yes. It can be argued that Staff has implicitly acknowledged or at least understood
116 the Ameren Companies' approach to tree trimming. Referring to ICC Staff
117 Exhibit 9.09, specifically page 12 in the section titled "Tree Trimming," there is
118 language that suggests Staff understands AmerenCILCO does trim to avoid
119 clearance between trees and ungrounded supply conductors. Staff states it is
120 encouraged by the reduction of tree caused outages in 2004. In fact, tree caused
121 outages were reduced from 626 in 2003 to 226 in 2004. Staff noted relatively few
122 tree contacts during its 2005 circuit inspections. Results such as these would not
123 occur if AmerenCILCO were not trimming trees to avoid interference with
124 ungrounded supply conductors.

125 **Q. Mr. Spencer also takes issue with you claiming he authored the above report.**
126 **Can you respond?**

127 A. Yes. I never stated Mr. Spencer had authored this report. I simply used the exhibit
128 which was submitted by Staff and authored by Mr. Rockrohr as evidence that
129 AmerenCILCO does trim to avoid interference between trees and ungrounded
130 supply conductors. It was not my intent to misrepresent the authorship of the
131 report.

132 **Q. Mr. Spencer states on lines 334 and 335 that you were mistaken in your**
133 **reference to ICC Staff Exhibits 9.09 and 9.10 and his reference to**
134 **photographs in those exhibits. Do you have any comments?**

135 A. Yes. The question I was asked on line 99 was "Does Mr. Spencer offers any other
136 criticism"? Mr. Spencer does offer additional criticism of the Ameren
137 Companies' tree trimming program. While Mr. Spencer did not author the report

138 found in ICC Staff Exhibits 9.09 and 9.10 , he does author the report found in ICC
139 Staff Exhibit 10, specifically Schedule 10.01. In this report Mr. Spencer
140 comments on the tree conditions in the communities of Jacksonville and Decatur
141 and refers to photographs that are included in Schedule 10.01, specifically part 2
142 of Schedule 10.01 and titled Attachment "S". Many of the photographs Mr.
143 Spencer references in this report are similar to the types of tree contacts included
144 in the ECI study which highlight the fact that the tree growth described by Mr.
145 Spencer has little to no impact on safety or operating reliability.

146 **Q. Do you agree with Mr. Spencer's conclusion, that compliance with a no**
147 **contact approach will not necessarily require more frequent trimming?**

148 A. No. What Staff is now requiring is that we trim any tree that may have growth in
149 contact with Ameren Companies' conductors prior to trimming the tree again
150 within a four-year trim cycle. Factually, in order to assure that there will be no
151 tree growth in contact with our primary conductors, we would have to trim our
152 system every two years. We have familiarity with the four-year cycle and are well
153 aware of the rate of growth and other conditions prevalent in the Ameren
154 Companies' service territories. We know from our own experience that in order to
155 be more aggressive in terms of vegetation growth management, a more frequent
156 trim cycle is required. We have studied the Staff proposal and know that we will
157 have to trim every two years. For example, the amount of re-growth on trees that
158 have to be pruned as a part of Ameren Services' vegetation management program
159 is not just species dependent. The amount of re-growth a tree will exhibit is
160 effected by the health of the tree, climate conditions, soil types, amount of

161 pruning, size of the tree trimmed, location with regards to proximity to the line
162 and maintenance history such as fertilization, watering and other pruning, are all
163 factors that can contribute to the re-growth a tree will exhibit. The point is, to do
164 what Staff would require, which by their own definition as I stated previously in
165 testimony is that the Ameren Companies would need to assure all trees near their
166 lines throughout their service territories are trimmed such that there are no tree
167 contacts with energized primary conductors before they return to trim again. We
168 would have to schedule our entire system every two years and still do some
169 midcycle trimming to assure no contact.

170 **Q. Do you agree with Mr. Spencer's suggestion that a no contact approach**
171 **might be achieved by obtaining more clearance when trimming over the**
172 **length of a tree trimming cycle?**

173 A. No. Trimming more growth from a tree can many times lead to more vigorous re-
174 growth. Also, providing more clearance, which requires final pruning cuts to be
175 further removed from the conductor, and may require the Ameren Company to
176 violate easement rights and the other factors as mentioned in Part 305 specifically,
177 tree aesthetics, property owner rights, prior pruning history and the health of the
178 tree. The proper method as described in ANSI A300 is to prune to a lateral limb
179 of sufficient size so that the wound may compartmentalize properly. In order to
180 obtain more clearance as Staff recommends, this would require pruning back to a
181 parent branch which may be beyond the easement rights and could jeopardize the
182 health of a tree, neither of which is likely to be acceptable to the property owner.

183 In addition, pruning more growth requires more time, which unnecessarily
184 increases costs.

185 **Q. Do you agree with Mr. Spencer's suggestion that the Ameren Companies**
186 **may be able to comply with a no contact trimming approach by more**
187 **efficient allocation of existing resources?**

188 A. Absolutely not. While we continually assess our operations and look for
189 opportunities to improve, our current vegetation program has integrated many of
190 the industry reported best practices. We evaluate contractor's performance using
191 an audit program and a performance management metrics that promotes quality
192 performance with regards to safety, reliability, customer satisfaction, process
193 efficiency and productivity. Within the performance management program,
194 contractor supervisory personnel and Ameren Service's vegetation supervisors
195 review the scheduled years work in advance of the work being performed and
196 incorporate identified efficiencies. We then forecast the amount of mechanized
197 equipment, herbicide applications, tree removal guidelines and crew make up to
198 fit the work being done. In short, the Ameren Companies have in place an
199 efficient process to trim vegetation on a four-year cycle. The requirements of a no
200 contact approach are well beyond a reallocation of existing resources as I just
201 described.

202 **Q. Mr. Spencer states "to the extent that trimming to the "no contact" standard**
203 **imposes any additional costs, I have no basis to expect those additional costs**
204 **to be significant". Do you have any comments regarding Mr. Spencer's**
205 **conclusion?**

206 A. Yes. Most notably that Mr. Spencer has only offered this conclusion. There are no
207 facts, no analysis, quantitative or otherwise, simply nothing in support of his
208 claim and this in the face of documented cost support. The undisputed facts are, if
209 the Ameren Companies are required to comply with Staff's now interpretation of
210 NESC Rule 218, millions of dollars will be spent as I detailed in my rebuttal
211 testimony.

212 Furthermore, Mr. Spencer has evaluated AmerenIP's trimming program and
213 prepared a memorandum dated August 17, 2005 documenting the results of his
214 field inspections and assessment of the AmerenIP trimming program in those
215 communities. The memorandum is included as attachment "S" to his reliability
216 assessment Staff report for AmerenIP and is a part of Schedule 10.01 (IPC). He
217 goes on to state on lines 484 thru 488 "*the problem areas discussed in this memo*
218 *and the photos shown are meant to demonstrate that AmerenIP still has a*
219 *significant amount of work to do to achieve and maintain a 4 year (minimum) trim*
220 *cycle that is in compliance with NESC 218 in Jacksonville and Decatur and, I can*
221 *only suspect, in other parts of its service territory.*" This statement is seemingly
222 contradictory to Mr. Spencer's conclusion, that he does not expect additional
223 costs for trimming to a no contact standard to be significant. He is telling the
224 Commission that AmerenIP has a "significant" amount of work to do". it must
225 logically follow that more resources than are already committed by AmerenIP are
226 required to accomplish the tree trimming objectives as we interpret NESC Rule
227 218. Then, if we are to pursue tree trimming as Mr. Spencer now proposes, even
228 greater resources must be required.

229 **Q. Do you have comments regarding Mr. Spencer's analysis of Respondent's**
230 **Exhibit 16.5, Schedule 1?**

231 A. Yes. The "analysis" is rather limited and conclusory in nature. The exhibit
232 displays the required expenditures over a four year period, in order to achieve the
233 new vegetation trimming standard that Staff has proposed. Staff wants assurances
234 that trees will never be in contact with AmerenCILCO's, AmerenIP's and
235 AmerenCIPS' primary distribution conductors prior to them being trimmed again.
236 This is a change from maintaining a system on a four-year trim cycle. As I have
237 stated our unrefuted analysis shows that a two year cycle would be required to
238 assure no contact. A requirement of this type will result in an extensive increase
239 in the number of trimming and supervisory personnel necessary to achieve and
240 maintain a no contact vegetation clearance standard on our distribution systems.
241 Respondent's Exhibit 16.5 at lines 1 thru 7 details the estimated expenditures of
242 years one through four of Ameren Service's accelerated program. The total
243 amounts to maintain a no touch scenario as shown on line 12 do include savings
244 we would accomplish with regard to trimming costs of two year cycle vs. a four
245 year cycle. Once we achieve a two year cycle, the cost per mile to maintain our
246 distribution system will actually be less than our current cost per mile of our four
247 year cycle. Nonetheless, this savings is offset by the fact we have to trim more
248 frequently.

249 **Q. Do you have any comments regarding Mr. Rockrohr's response to your**
250 **testimony?**

251 A. Yes. In my testimony, I stated that Staff's statement outages classified as
 252 unknown or weather related often involves trees was inaccurate. Staff provides no
 253 evidence in their exhibit that outages classified as unknown or weather related
 254 often involve trees.

255 **Q. You had also testified the ECI study suggests that mere contact by small tree**
 256 **growth does not result in outages, and Mr. Rockrohr responded. Is he**
 257 **accurate in his assessment?**

258 A. Mr. Rockrohr stated that tree limbs often make contact with conductors during
 259 high winds, causing the conductors to move and contact with one another,
 260 resulting in an interruption. He then stated a patrol conducted after such an event
 261 would not likely detect that a tree was involved. I disagree. If a limb made enough
 262 sustained contact to cause the phase to move to a point that an interruption
 263 resulted, this type of tree contact would have been identified on a patrol and
 264 would be listed as a tree-caused outage. The cause code for such an outage is
 265 listed in Ameren Service's Outage Analysis system as "TC" for tree contact.

266 **Q. Please continue.**

267 A. Using Mr. Rockrohr's scenario of high winds, there are times when the wind
 268 velocity itself is enough to cause abnormal movement in the conductors or
 269 galloping of the conductors. High winds can cause the conductors to get close to
 270 one another or come in contact resulting in an interruption. This occurs in the
 271 complete absence of trees or any other vegetation, and this would be a type of
 272 outage that might also be classified as unknown or weather related. Similarly,
 273 Mr. Rockrohr mentions the weight of snow and ice on limbs during ice storms or

274 late spring snows contributing to many outages. I agree that this can and does
275 occur, however, many of those situations would be classified as tree-caused
276 outages. The outage cause code may be listed as tree contact "TC" or tree broke
277 "TB" depending upon whether or not the limbs actually broke from the tree and
278 contacted Ameren Company facilities or if the weight of the snow and ice caused
279 the limb to move and contact the line resulting in a service interruption. My point
280 remains, Staff's statement assumes that some large number of tree related
281 outages are occurring and are unreported. To my knowledge this is not the case.

282 **Q. Does this conclude your testimony ?**

283 A. Yes.

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