

ILLINOIS COMMERCE COMMISSION

DOCKET NO. 14-0514

SURREBUTTAL TESTIMONY

OF

LUCAS D. KLEIN, P.E., P.M.P.

Submitted On Behalf Of

AMEREN TRANSMISSION COMPANY OF ILLINOIS

April 21, 2015

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4 **LUCAS D. KLEIN**

5 **Submitted On Behalf Of Ameren Transmission Company of Illinois**

6 **I. INTRODUCTION**

7 **Q. Please state your name, address and present position.**

8 A. My name is Lucas D. Klein. My business address is 1901 Choteau Avenue, St. Louis,
9 Missouri 63116. I am a Project Manager in the Transmission Department of Ameren Services
10 Company. Ameren Services is designing a new 345 kilovolt (kV) electric transmission line in
11 Peoria and Knox Counties, on behalf of Ameren Transmission Company of Illinois (ATXI). The
12 Transmission Line and related facilities constitute the Spoon River Project (Project).

13 **Q. Are you the same Lucas Klein who sponsored direct and rebuttal testimony in this**
14 **proceeding?**

15 A. Yes, I am.

16 **II. PURPOSE AND SCOPE**

17 **Q. What is the purpose of your surrebuttal testimony?**

18 A. The purpose of my testimony is to provide an overview of ATXI's response to Staff and
19 Intervenors' rebuttal testimony on non-need issues, including: (1) the route modifications
20 proposed by Staff and Intervenor Mr. Steven Ramp; (2) other concerns raised by Staff and
21 Intervenors about ATXI's routes; and (3) cost issues. I also provide a cost estimate for Route A

22 with the modification Mr. Ramp proposed in his revised rebuttal testimony. My failure to
23 address any testimony should not be construed as an endorsement of that testimony.

24 **Q. What are the conclusions of your surrebuttal testimony?**

25 A. Regarding routing, Staff recommends the Commission approve ATXI's Preferred Route
26 (Route A), with the Zelnio and Ramp modifications (as proposed in their respective direct
27 testimony), and finds Route A superior to Route B. ATXI agrees that Route A is the superior
28 choice. Regarding the route modification proposed by Mr. Ramp and referred to as his "Alt 1"
29 modification (the modification which proceeds due east from the north side of I-74 at the point
30 where Routes A and B diverge and then turns 90 degrees south to return to ATXI's proposed
31 routes along I-74), ATXI can construct this modification if ordered by the Commission.

32 However, the Commission should be aware ATXI estimates Route A or B with Mr.
33 Ramp's Alt 1 to be more costly than Route A or B without the Alt 1 modification. ATXI can
34 construct Mr. Ramp's "Alt 2" modification (which I describe in more detail below), as it is a
35 hybrid of ATXI's proposed routes. However, this modification is less desirable than Route A
36 because of added risks associated with increased pipeline paralleling and proximity to the three
37 residences from which Route A was designed to be further away.

38 Regarding the route modification proposed by Staff witness Mr. Rockrohr as his
39 Attachment C modification, ATXI is not aware of any preference expressed by landowners for
40 that modification. As the Attachment C modification is estimated to be more costly and will be
41 more difficult to access for construction and maintenance than ATXI's proposed route, ATXI
42 does not recommend that it be approved.

43 **Q. Are you sponsoring any exhibits in support of your surrebuttal testimony?**

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

- 45 • ATXI Exhibit 19.1 – Data Request Responses regarding Project Cost

46 **III. FINANCING THE PROJECT**

47 **Q. Does Mr. Rockrohr agree with ATXI that the Company has met the criteria for a**
48 **Certificate under Section 8-406 of the Public Utilities Act?**

49 **A.** Yes. In his rebuttal testimony, Mr. Rockrohr states he has no reason to doubt ATXI
50 witness Mr. Darrell Hughes’ assertions that even with the increased Project cost forecast, ATXI
51 can finance the Project without adverse financial consequences.

52 **IV. ROUTE MODIFICATIONS PROPOSED BY STAFF AND INTERVENORS**

53 **Q. What proposed route modifications are you addressing in your surrebuttal**
54 **testimony?**

55 **A.** I discuss three. First, I discuss Staff witness Mr. Rockrohr’s proposed modification to
56 ATXI’s Route A. Second, I discuss the Alt 1 modification Mr. Ramp proposed to both ATXI’s
57 Route A and Route B. Because Mr. Ramp stated this modification could merge with either
58 Route A or Route B, ATXI has identified two separate “Alt 1” route alternatives as shown on
59 ATXI Exhibit 16.4 (referred to as Route A, Alt 1 and Route B, Alt 1). The only difference
60 between these two alternatives is the short north-south segment at the eastern end: Route A, Alt 1
61 merges with ATXI’s Route A and Route B, Alt 1 merges with ATXI’s Route B. In other words,
62 Mr. Ramp’s Alt 1 is essentially the same whether it alters ATXI Route A or Route B.

63 Finally, in his revised rebuttal testimony, Mr. Ramp proposed an Alt 2 modification,
64 which is essentially a hybrid of Routes A and B. The only difference between Route A and

65 Route A as modified by Alt 2 is that the line would parallel I-74 to the north and use Route B
66 from the point where Routes A and B diverge just east of Knox Highway 21 to where they
67 remerge north of I-74 southwest of Trenton Corners, Illinois. I discuss this as well. Maps of Mr.
68 Ramp's proposed modifications are attached to Mr. Koch's surrebuttal testimony.

69 **A. Staff Witness Mr. Rockrohr's Proposed Route Modifications**

70 **Q. Did Mr. Rockrohr revise his conclusions regarding the route of the proposed**
71 **Transmission Line on rebuttal?**

72 A. Yes. In his rebuttal testimony, Mr. Rockrohr explained that he continues to view Route
73 A, with the two modifications proposed in his direct testimony, as the superior route. However,
74 he now recommends the Commission approve ATXI's Route A with Mr. Zelnio's modification
75 and Mr. Ramp's Alt 1 modification, because he finds this overall route to be an acceptable
76 alternative. Mr. Rockrohr explained that he does not object to Mr. Zelnio's modification, as it
77 satisfies his concerns on Mr. Zelnio's property. He also explained that despite its higher
78 construction costs, he does not oppose Mr. Ramp's Alt 1 modification because of two purported
79 advantages it has over ATXI's unmodified routes, which ATXI witness Mr. Matthew Koch
80 discusses. With respect to his proposed Attachment C modification, due to its significant
81 additional construction cost, his continued support of this modification depends wholly upon
82 whether affected landowners indicate a preference for this modification over ATXI's unmodified
83 route.

84 **Q. Is ATXI aware of any landowners who prefer Mr. Rockrohr's Attachment C**
85 **modification?**

86 A. No.

87 **Q. Does ATXI still have concerns about constructing Mr. Rockrohr's Attachment C**
88 **modification?**

89 A. Yes. As I stated in my rebuttal testimony, while ATXI can build this modification, it
90 raises concerns the Commission should consider. Part of the low-lying area is a floodplain,
91 which is listed as a Sensitivity in the direct testimony of ATXI witness Mr. Koch. In addition, as
92 discussed by ATXI witness Mr. Adam Molitor, routing the Transmission Line parallel to the
93 railroad tracks may require periodic grounding of the rails. If either normal operation of the
94 Transmission Line or grounding the rails is deemed by the railroad owner to impact its railroad
95 communications, which are transmitted via the rails, then the railroad owner may require ATXI
96 to fund the installation of communication equipment to mitigate this impact. Also, installing
97 structure foundations within a railroad's zone of influence can require installation of steel
98 casings, which in turn, increase construction costs. In addition to those concerns, building this
99 modification will increase structure installation and maintenance access costs due to terrain and
100 existing land features, specifically the area referenced in ATXI Exhibit 14.1 to Mr. Molitor's
101 rebuttal testimony.

102 **B. Mr. Steven Ramp's Proposed Route Modifications**

103 **Q. Does ATXI still have concerns about constructing Mr. Ramp's Alt 1 modification?**

104 A. Yes. As I stated in my rebuttal testimony, while ATXI can build this modification, it
105 raises some environmental, routing, line design, and engineering concerns the Commission
106 should consider. Messrs. Koch and Molitor addressed these concerns in their rebuttal
107 testimonies and again in their surrebuttal testimonies.

108 **Q. Have you prepared a cost estimate for the route modification identified in Mr.**
109 **Ramp's revised rebuttal testimony as Alt 2?**

110 A. Yes. The estimated cost for the Transmission Line along Route A with Mr. Ramp's Alt 2
111 modification is approximately \$91.5 million.

112 **Q. Is this cost estimate based on the same cost model and underlying assumptions as**
113 **the cost estimates for ATXI's Proposed Routes, and the other route modifications proposed**
114 **by Staff and Intervenors?**

115 A. Yes. The cost estimate for Mr. Ramp's Alt 2 is based on the same cost model and
116 underlying assumptions as the cost estimates for ATXI's Proposed Routes and the Staff and
117 Intervenors' proposed modifications (which I provided in my rebuttal testimony). Likewise, a
118 full end-to-end estimate was developed for purposes of comparison and to avoid
119 misrepresentation of Project costs that remain constant regardless of route length.

120 **Q. Are there any additional considerations that the Commission should be aware of**
121 **when considering Mr. Ramp's proposed Alt 2 route modification?**

122 A. Yes. It is ATXI's understanding that Mr. Ramp's proposed Alt 2 is the same route that
123 was the subject of Staff data request ENG 1.05. As I noted in my response to data request ENG
124 1.05, ATXI recognizes that the estimated cost for the Transmission Line utilizing Mr. Ramp's
125 Alt 2 is less than ATXI's preferred Proposed Route (Route A). However, ATXI intentionally
126 selected the preferred route to be the route south of I-74 in the section in question so that the
127 route would be further away from three residences. The route south of I-74 also poses less
128 potential risk as it parallels a pipeline for less distance. Further, by utilizing Route B in this area,

129 Alt 2 shifts the line from certain parcels owned by members of the SP Parties group and onto Mr.
130 and Mrs. Shipley's property, who filed direct testimony opposing this route.

131 **Q. Can ATXI build Mr. Ramp's Alt 2 modification?**

132 A. Yes, ATXI can construct the Transmission Line along Mr. Ramp's Alt 2 modification.
133 The proposed modification to Route A, as ATXI understands it, is a hybrid of ATXI's proposed
134 Route A and Route B.

135 **V. INTERVENORS' CONCERNS ABOUT ATXI'S PROPOSED ROUTES**

136 **Q. Do Intervenors raise concerns about Route A in their rebuttal testimonies?**

137 A. Yes. The following is a summary of Intervenors' rebuttal concerns regarding Route A:

- 138 • Mr. Randall Moon continues to believe that ATXI's Route B is superior to Route A.
139 Generally, his reasons are that he believes ATXI has not adequately considered Route
140 A's visual impact, or countered his assertion that Route A impacts homes to a greater
141 degree than Route B. He also states his concerns about impacts to farming operations,
142 and property valuation and compensation have not been assuaged.
- 143 • Mr. Gerald Moon continues to believe that Route B is superior to Route A. Generally,
144 his reasons are that Route A will have greater environmental damage during construction
145 than Route B, will impact cattle and farming operations on his property, and will result in
146 visual impacts, corona noise, and reduction in property values.
- 147 • Mr. Ramp states Route B is superior to Route A. Generally, his reasons are that, with
148 respect to the four-mile section where Routes A and B diverge and merge in Knox
149 County, Illinois, Route B impacts less highly-productive farmland, is shorter, and further

150 from certain residences south of I-74 than Route A. Mr. Ramp also believes Route A will
151 have a negative impact on farming operations on his property.

152 • Mr. William McMurtry continues to believe that Route B is superior to Route A.
153 Generally, his reasons are that there are more steep slopes along Route A, and that Route
154 A crosses I-74 four times while Route B does not cross the interstate. He also expressed
155 concerns regarding visual impacts, impacts to landowners, adequacy of clear zone along
156 I-74, and possible historic mining operations on his property.

157 • Ms. Kellie Tomlinson continues to believe that Route B is superior to Route A.
158 Generally, her reasons are concerns regarding impacts to the private driveway on her
159 property, proximity to her home, EMF issues, additional tree clearing along Route A, and
160 the presence of slopes and possible historic mining operations on her property.

161 • Mr. Jack Mason opposes Route A because he believes ATXI has not taken into account
162 that Bethany Baptist Church is in the process of constructing a storage/deacon ministry
163 building near its parking lot and the proximity of the proposed Transmission Line to
164 soccer fields on the church's property.

165 • Mr. Thomas Palmer opposes Route A. Generally, his reasons are concerns regarding
166 vegetation removal, road noise, negative visual impacts and reduced property values.

167 • Mr. John Kunkle opposes Route A. Generally, his reasons are concerns regarding tree
168 clearing, conservation easements on his property, impacts to his driveway, EMF issues,
169 impacts to farming, and reduced property values.

170 **Q. Do any Intervenors raise concerns about Route B in their rebuttal testimonies?**

171 A. No.

172 **Q. Do any of the concerns raised by Intervenors call into question ATXI's ability to**
173 **construct Route A or B?**

174 A. No, as these concerns are the same as those raised in Direct and ATXI has already
175 addressed those. As a general matter, these concerns do not suggest that Route A or Route B
176 cannot be built. ATXI's other rebuttal and surrebuttal witnesses, Messrs. Molitor, Nelson, Koch
177 and Dr. Gelmann, address Intervenors' concerns more specifically.

178 **Q. Will the construction and maintenance equipment impede the use of landowner**
179 **driveways?**

180 A. ATXI's construction supervisor will coordinate with ATXI's contractors and landowners
181 to access the right-of-way in order to limit to the shortest possible time any complete obstruction
182 to any landowner's driveway.

183 **VI. PROJECT COST**

184 **A. Response to Intervenor Mr. Randall Moon Regarding Costs**

185 **Q. Mr. Moon states that ATXI may be underestimating the cost of its right-of-way**
186 **along Route A because the area between Brimfield and Peoria is covered by a zoning plan**
187 **indicating that residential construction would be appropriate in that area. If certain**
188 **parcels in this area were valued for land right acquisition as transitional instead of as**
189 **agricultural, would that have a material affect on Project cost?**

190 A. No.

191 **B. Response to Intervenor Mr. William McMurtry Regarding Costs**

192 **Q. Is ATXI unable to determine the cost difference between an 80-foot pole and a 180-**
193 **foot pole as Mr. McMurtry asserts?**

194 A. No. ATXI was unable to determine a specific price differential for the circumstances set
195 forth in data request WM-ATXI 3.04. At this time, ATXI does not have a price for an 80-foot
196 tangent pole for areas prone to galloping. However, the difference in material cost of an 85-foot
197 pole and a 180-foot pole, both poles being tangent poles for use in areas prone to galloping and
198 all things being equal, is approximately \$34,000 based on current market prices for steel.

199 **Q. Mr. McMurtry continues to believe that the “estimated cost of angle structures**
200 **would be hard to determine and could alter the cost of Route A.” How do you respond?**

201 A. As I stated in my rebuttal testimony, Mr. McMurtry appears to base his belief that the
202 cost of angle structures could be “hard to determine” on ATXI’s response to data request WM
203 1.06. That data request sought information regarding the depth of a tangent structure foundation,
204 and ATXI responded that it is “not possible to determine an *exact* depth of pier embedment”
205 because “[t]he depth of the foundation is dependent upon many factors...” and due to
206 “significant variation in soil strength within the soil descriptions” provided by Mr. McMurtry in
207 his data request. Structure foundation depth, which was sought by Mr. McMurtry in his data
208 request, accounts for only a portion of the total structure cost. The remaining components of the
209 structure cost—including the steel pole, insulators, hardware and installation labor—are not
210 affected by soil characteristics. Further, it is unlikely that a holistic change from ATXI’s
211 estimated foundation costs, which is not expected, would be limited to angle structures, as Mr.
212 McMurtry appears to assert.

213 **Q. Can you please explain why ATXI provided several different Project cost estimates**
214 **as Mr. McMurty discusses on page five of his rebuttal testimony?**

215 A. In my direct testimony, ATXI Exhibit 4.0, I provided cost estimates that were later
216 revised. When preparing its response to data request ENG 1.05, ATXI identified a few data
217 entry errors in the right-of-way classification along the proposed routes. Those errors were
218 corrected and updated costs were presented in ENG 1.05. The very same costs were given in my
219 rebuttal testimony, ATXI Exhibit 12.0. I reaffirm the estimates below.

220 Mr. McMurty also calls attention to a typographical error ATXI made in its original
221 response to SP 1.15. In that response, I inadvertently transposed two cost estimates in a table
222 provided as part of that response. Upon being alerted to this mistake by a data request Mr.
223 McMurtry sent to Staff, ATXI submitted a revised data request response, SP 1.15R, in which the
224 mistake was corrected. Copies of these data request responses are attached at ATXI Exhibit
225 19.1.

226 **Q. So that the record is clear, what is ATXI's estimated cost of Route A?**

227 A. The estimated cost for the Transmission Line along Route A without modification is
228 \$92.1 million.

229 **Q. So that the record is clear, what is ATXI's estimated cost of Route B?**

230 A. The estimated cost for the Transmission Line along Route B without modification is
231 \$97.9 million.

232 **Q. Do you have concerns about the Project cost discussion Mr. McMurtry provided on**
233 **page six of his rebuttal testimony?**

234 A. Yes. It is incorrect to compare the high range of the estimate for one route to the low
235 range of the estimate for another, as many of the risks that affect contingency use are common to
236 both routes and will impact the cost in the same way, up or down. In other words, Mr.
237 McMurtry's comparison assumes one set of contingency outcomes for one route and a wholly
238 different set of outcomes for the other route, which leads to an inequitable comparison.

239 **VII. CONCLUSION**

240 **Q. Does this conclude your prepared surrebuttal testimony?**

241 A. Yes, it does.

**Ameren Transmission Company of Illinois's
Response to ICC Staff Data Requests
Docket No. 14-0514
Petition for a Certificate of Public Convenience and Necessity, pursuant to Section 8-406 of
the Illinois Public Utilities Act, and an Order pursuant to Section 8-503 of the Public
Utilities Act, to Construct, Operate and Maintain a New High Voltage Electric Service Line
in the Counties of Peoria and Knox, Illinois.
Data Request Response Date: 9/24/2014**

ENG 1.05

Please provide ATXI's estimate of the proposed 345 kV transmission line cost, in dollars, if ATXI were to use Route A as shown in ATXI Ex. 8.2, except for where Route A crosses south of and parallels Hwy 74 near the west end of the project the transmission line were to instead remain north of and parallel Hwy 74, following Route B (refer to pages 1 through 3 of ATXI Ex. 8.2 Appendix B [Part 2]). Please answer this data request by providing a table similar to the table at line 184 of ATXI Ex. 4.0 with an additional entry for the combination of Route A and Route B contemplated above.

RESPONSE

**Prepared By: Lucas D. Klein
Title: Project Manger
Phone Number: 314-554-4314**

The following table lists the revised estimated costs for the Transmission Line along both Route A and Route B (ATXI's Proposed Routes), and the estimated cost for the Transmission Line per Data Request ENG 1.05.

Table 1: Transmission Line Costs

	Estimated in millions
Route A	\$92.1 million
Route B	\$97.9 million
ENG 1.05	\$91.5 million

In answering this data request, ATXI identified a few errors in ATXI's classification of right-of-way (agricultural, commercial, transitional, or residential) along the proposed routes. The right-of-way classification impacts the estimated acquisition cost for right-of-way easements, which in turn impacts the estimated costs for the Transmission Line along the proposed routes. The table in this response reflects estimated costs using the corrected right-of-way classifications for all three routes.

Also, it is important to note that ATXI recognizes that the estimated cost for the Transmission Line per Data Request ENG 1.05 is less than ATXI's preferred Proposed Route (Route A); however, ATXI intentionally selected the preferred route to be the route south of Interstate 74 in the section in question such that the route would be further away from three residences. The route south of Interstate 74 also poses less potential risk as it is parallels a pipeline for less distance.

**Ameren Transmission Company of Illinois's
Response to SP Parties Data Requests
Docket No. 14-0514**

**Petition for a Certificate of Public Convenience and Necessity, pursuant to Section 8-406 of the Illinois Public Utilities Act, and an Order pursuant to Section 8-503 of the Public Utilities Act, to Construct, Operate and Maintain a New High Voltage Electric Service Line in the Counties of Peoria and Knox, Illinois.
Data Request Response Date: 10/20/2014**

SP 1.15

Please refer to ATXI Exhibit 8.2 [Part 1 of 2] (Routing Study), p. 12 (page number at bottom of page). You may consider the potential route alternative segment discussed in the third paragraph of this page (starting, “The segment of the Potential Route Alternatives that paralleled the railroad...”) to be the “RR ROUTE.” With regards to the RR ROUTE, assuming it were utilized to construct this Project, please provide:

- a. A description of how, and where, the RR ROUTE would intersect with either Route A or Route B;
- b. The length of the RR ROUTE;
- c. The number of residential structures within: (i) 0-75’; (ii) 75-150’; (iii) 150-300’; (iv) 300-500’; (v) 500-1,000’ of the RR ROUTE;
- d. The number of non-residential structures within 75’ of the RR ROUTE;
- e. The number of landowners crossed by the RR ROUTE;
- f. The number of parcels crossed by the RR ROUTE;
- g. The number and type of each structure as identified in SP→ATXI 1.03 that would need to be used to construct the project along of the RR ROUTE;
- h. The estimated incremental cost of constructing the Project along the RR ROUTE versus (i) Route A and (ii) Route B; and
- i. Any known planned developments within 1000’ of the RR ROUTE.

Provide any and all bases for any conclusions reached and determinations made, as well as all work papers, communications, and studies used in the in these calculations.

RESPONSE

**Prepared By: Matthew Koch
Title: Project Manager and Environmental Consultant, HDR Engineering, Inc.
Phone Number: 312.443.4914**

ATXI objects to this request as overly broad and unduly burdensome. Subject to and without waiving this objection ATXI responds as follows.

Route A and Route B, as filed by ATXI, may differ from the previous version(s) of those routes as reviewed during the Potential Route Alternative phase of the project. The following responses describe the RR ROUTE as replacing a portion of the ATXI-filed Route A and Route B. The

routes are subsequently defined as RR ROUTE A and RR ROUTE B when modified by use of the RR ROUTE segment.

- a. The west endpoint of the RR ROUTE segment would intersect with both Route A and Route B on the north side of the railroad in the west ½ of Section 19 in Persifer Township (Township 11 North, Range 3 East).

The east endpoint of the RR ROUTE would intersect with Route A along the north side of Interstate 74 in the northeast ¼ of Section 9 of Elba Township (Township 10 North, Range 4 East).

The east endpoint of the RR ROUTE segment would intersect with Route B along the north side of U.S. Highway 150 in the southeast ¼ of Section in Truro Township (Township 11 North, Range 4 East).

- b. In order to provide a meaningful comparison of the RR ROUTE segment to Route A and Route B, ATXI is providing the information for a complete end-to-end review of the RR ROUTE extending from the Sandburg substation to the Fargo substation. The RR ROUTE segment is combined with the respective sections of Route A and Route B to the west and to the east of the RR ROUTE segment. Those two resultant routes extending from the Sandburg substation to the Fargo substation are identified as “RR ROUTE A” and “RR ROUTE B”. The two routes are shown on Attachment 1.

The length of RR ROUTE A is 41.6 miles and the length of RR ROUTE B is 44.4 miles.

- c. The number of residential structures within the distances requested for RR ROUTE A and RR ROUTE B are as follows:

Distance (feet)	RR ROUTE A	RR ROUTE B
(i) 0-75	0	0
(ii) 75-150	0	0
(iii) 150-300	6	2
(iv) 300-500	21	20
(v) 500-1,000	92	57

- d. There are four non-residential structures within 75 feet of RR ROUTE A and one non-residential structure within 75 one of RR ROUTE B.
- e. According to parcel data from Knox County and Peoria County, there are 144 landowners crossed by RR ROUTE A and 159 landowners crossed by RR ROUTE B.
- f. According to parcel data from Knox County and Peoria County, there are 241 parcels crossed by RR ROUTE A and 261 parcels crossed by RR ROUTE B.

- g. The following table lists the estimated type of each structure for RR ROUTE A and RR ROUTE B. It should be noted that this information would be subject to modification as detailed transmission line design engineering has not been completed.

Structure Type	RR ROUTE A	RR ROUTE B
Tangent	147	207
Light-Angle	74	45
Medium-Angle Dead-End	14	7
Light-Heavy-Angle Dead-End	10	7
Heavy-Angle Dead-End	14	9
Tangent Dead-End	0	1

- h. The following table lists the estimated total costs (in \$millions) for the Transmission Line along Route A, RR Route A, Route B, and RR Route B.

Route	Estimated Cost (\$millions)
Route A	\$92.1
RR Route A	\$97.9
Route B	\$99.7
RR Route B	\$100.0

- i. ATXI is not aware of any planned developments within 1000 feet of the RR ROUTE segment.

**Ameren Transmission Company of Illinois's
Response to SP Parties Data Requests
Docket No. 14-0514**

Petition for a Certificate of Public Convenience and Necessity, pursuant to Section 8-406 of the Illinois Public Utilities Act, and an Order pursuant to Section 8-503 of the Public Utilities Act, to Construct, Operate and Maintain a New High Voltage Electric Service Line in the Counties of Peoria and Knox, Illinois.

Revised Data Request Response Date: 3/12/2015

SP 1.15R

Please refer to ATXI Exhibit 8.2 [Part 1 of 2] (Routing Study), p. 12 (page number at bottom of page). You may consider the potential route alternative segment discussed in the third paragraph of this page (starting, "The segment of the Potential Route Alternatives that paralleled the railroad...") to be the "RR ROUTE." With regards to the RR ROUTE, assuming it were utilized to construct this Project, please provide:

- a. A description of how, and where, the RR ROUTE would intersect with either Route A or Route B;
- b. The length of the RR ROUTE;
- c. The number of residential structures within: (i) 0-75'; (ii) 75-150'; (iii) 150-300'; (iv) 300-500'; (v) 500-1,000' of the RR ROUTE;
- d. The number of non-residential structures within 75' of the RR ROUTE;
- e. The number of landowners crossed by the RR ROUTE;
- f. The number of parcels crossed by the RR ROUTE;
- g. The number and type of each structure as identified in SP→ATXI 1.03 that would need to be used to construct the project along of the RR ROUTE;
- h. The estimated incremental cost of constructing the Project along the RR ROUTE versus (i) Route A and (ii) Route B; and
- i. Any known planned developments within 1000' of the RR ROUTE.

Provide any and all bases for any conclusions reached and determinations made, as well as all work papers, communications, and studies used in the in these calculations.

RESPONSE

Prepared By: Matthew Koch
Title: Project Manager and Environmental Consultant, HDR Engineering, Inc.
Phone Number: 312.443.4914

REVISED RESPONSE: ATXI has revised subsection h. only in this response. The numbers for RR Route A and Route B were inadvertently transposed in the original response submitted October 20, 2014.

ATXI objects to this request as overly broad and unduly burdensome. Subject to and without waiving this objection ATXI responds as follows.

Route A and Route B, as filed by ATXI, may differ from the previous version(s) of those routes as reviewed during the Potential Route Alternative phase of the project. The following responses describe the RR ROUTE as replacing a portion of the ATXI-filed Route A and Route B. The routes are subsequently defined as RR ROUTE A and RR ROUTE B when modified by use of the RR ROUTE segment.

- a. The west endpoint of the RR ROUTE segment would intersect with both Route A and Route B on the north side of the railroad in the west ½ of Section 19 in Persifer Township (Township 11 North, Range 3 East).

The east endpoint of the RR ROUTE would intersect with Route A along the north side of Interstate 74 in the northeast ¼ of Section 9 of Elba Township (Township 10 North, Range 4 East).

The east endpoint of the RR ROUTE segment would intersect with Route B along the north side of U.S. Highway 150 in the southeast ¼ of Section in Truro Township (Township 11 North, Range 4 East).

- b. In order to provide a meaningful comparison of the RR ROUTE segment to Route A and Route B, ATXI is providing the information for a complete end-to-end review of the RR ROUTE extending from the Sandburg substation to the Fargo substation. The RR ROUTE segment is combined with the respective sections of Route A and Route B to the west and to the east of the RR ROUTE segment. Those two resultant routes extending from the Sandburg substation to the Fargo substation are identified as “RR ROUTE A” and “RR ROUTE B”. The two routes are shown on Attachment 1.

The length of RR ROUTE A is 41.6 miles and the length of RR ROUTE B is 44.4 miles.

- c. The number of residential structures within the distances requested for RR ROUTE A and RR ROUTE B are as follows:

Distance (feet)	RR ROUTE A	RR ROUTE B
(i) 0-75	0	0
(ii) 75-150	0	0
(iii) 150-300	6	2
(iv) 300-500	21	20
(v) 500-1,000	92	57

- d. There are four non-residential structures within 75 feet of RR ROUTE A and one non-residential structure within 75 one of RR ROUTE B.
- e. According to parcel data from Knox County and Peoria County, there are 144 landowners crossed by RR ROUTE A and 159 landowners crossed by RR ROUTE B.
- f. According to parcel data from Knox County and Peoria County, there are 241 parcels crossed by RR ROUTE A and 261 parcels crossed by RR ROUTE B.

- g. The following table lists the estimated type of each structure for RR ROUTE A and RR ROUTE B. It should be noted that this information would be subject to modification as detailed transmission line design engineering has not been completed.

Structure Type	RR ROUTE A	RR ROUTE B
Tangent	147	207
Light-Angle	74	45
Medium-Angle Dead-End	14	7
Light-Heavy-Angle Dead-End	10	7
Heavy-Angle Dead-End	14	9
Tangent Dead-End	0	1

- h. The following table lists the estimated total costs (in \$millions) for the Transmission Line along Route A, RR Route A, Route B, and RR Route B.

Route	Estimated Cost (\$millions)
Route A	\$92.1
RR Route A	\$99.7
Route B	\$97.9
RR Route B	\$100.0

- i. ATXI is not aware of any planned developments within 1000 feet of the RR ROUTE segment.