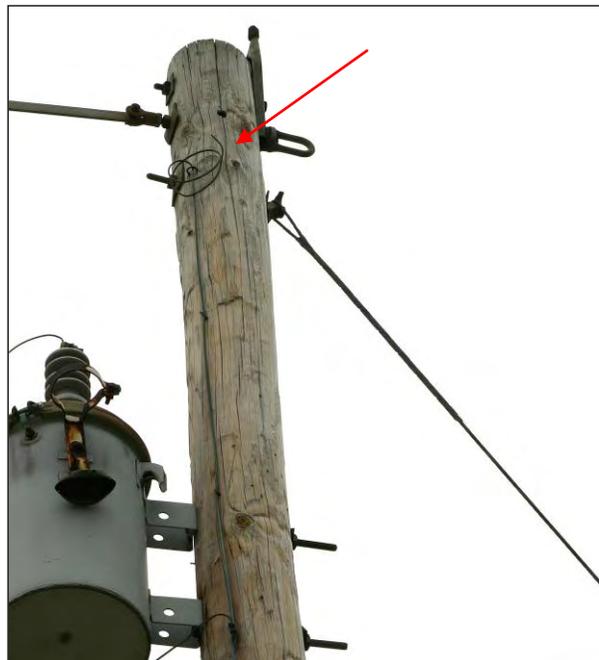


Figure 15 (Photo 07-IP1393)
Ungrounded 34 kV & 12 kV downguys without properly placed strain insulators
(NESC Guying Violation)

Circuit J34356, in the easement north of Constitution Court, Bethalto



Figure 16 (Photo 07-IP1398)
Ungrounded 12 kV downguy without strain insulator – ground wire installed to top of pole, but not connected to downguy
(NESC Guying Violation)
Circuit J34356, Rt. 159, Midway



Figures 17 & 18 (Photos 07-IP1406 & 07-IP1404)

**Broken strand in guy wire and strain insulator too low in ungrounded 12 kV downguy
(NESC Guying Violation)**

Circuit J34356, west of Geaman St. (Old Prairietown Rd.), Prairietown



Figure 19 (Photo 07-IP1407)

**Two ungrounded 12 kV downguys without strain insulators (new pole-- branded 1995)
(NESC Guying Violations)**

**Circuit J34356, west of Geaman St.
(Old Prairietown Rd.), Prairietown**



Figure 20 (Photo 07-IP1409)
Several (at least 14, with 3 very large) woodpecker holes in pole
Circuit J34356, Klondike Rd., north of Prairietown



O'Fallon Illinois 12 kV Circuit Q18245 was an AmerenIP worst performing circuit in 2006, with a SAIFI of 6.72. It is a relatively small urban circuit serving a southwestern portion of O'Fallon. At least a third of the circuit is underground, with another third or so in easements. Weather (66% of the interruptions) and overhead equipment problems (28%) were listed as the predominant causes of the customer interruptions in 2006. AmerenIP reported that the circuit suffered major wide-spread damage and outages caused by the July wind storms and the November/December ice storm. Staff found few structural problems when inspecting this circuit on May 9, 2007, noted no tree trimming problems, and found many animal guards in place. There were significant mapping errors. **Staff noted NESC guying violations at nineteen (19) locations.** Staff's field notes for this circuit are summarized in Attachment "F". Figures 21 and 22 show the NESC guying violations noted at one location.

Figures 21 & 22 (Photos 07-IP1471 & 07-1472)
Two ungrounded 12 kV downguys without strain insulators
(NESC Guying Violations)
Circuit Q18245, just north of Virginia Dr., O'Fallon



O'Fallon Illinois 12 kV Circuit Q18244 was an AmerenIP next-worst performing circuit in 2006, with a SAIFI of 5.49. It is a small urban circuit serving a portion of O'Fallon, with much of the circuit being underground and/or in back easements. Staff's inspection on May 9, 2007, was limited to overhead portions of the circuit that were readily accessible. No tree trimming problems or structural condition problems were noted. **Staff did find NESC guying violations at three locations**, which are summarized in Attachment "G". Figure 23 shows code guying violations at one location.

Figure 23 (Photo 07-IP1474)

Three ungrounded 34 kV overhead guys without properly placed strain insulators
(NESC Guying Violations)

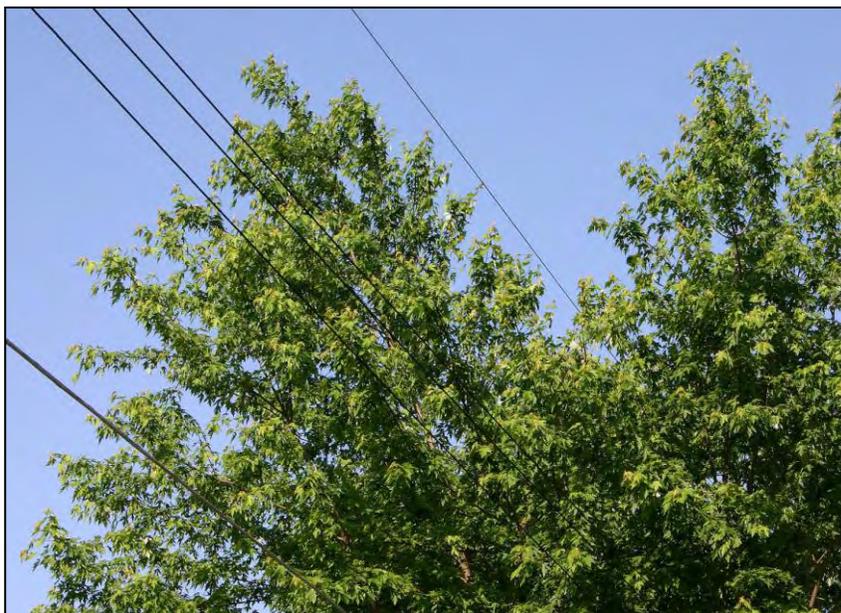
Circuit Q18244, W. State St. at the railroad crossing just east of Douglas St., O'Fallon



Lebanon Monroe Street Circuit N86228 was another of AmerenIP's next-worst SAIFI circuits in 2006, with a SAIFI of 5.12. This 4 kV circuit serves a western portion of Lebanon, with portions of the circuit in back easements. Staff confined its inspection on May 16, 2007, to the more accessible portions of the circuit and noted some tree trimming problems and only a few structural problems. **Staff noted NESC guying violations at fourteen (14) locations on this circuit before it discontinued looking for them.** Staff's inspection notes are summarized on Attachment "H". One of the tree trimming problems is shown in Figure 24.

Figure 24 (Photo 07-IP1476)

Maple tree into primary
Circuit N86228, Schuetz St.
east of Chamberlain St.,
Lebanon



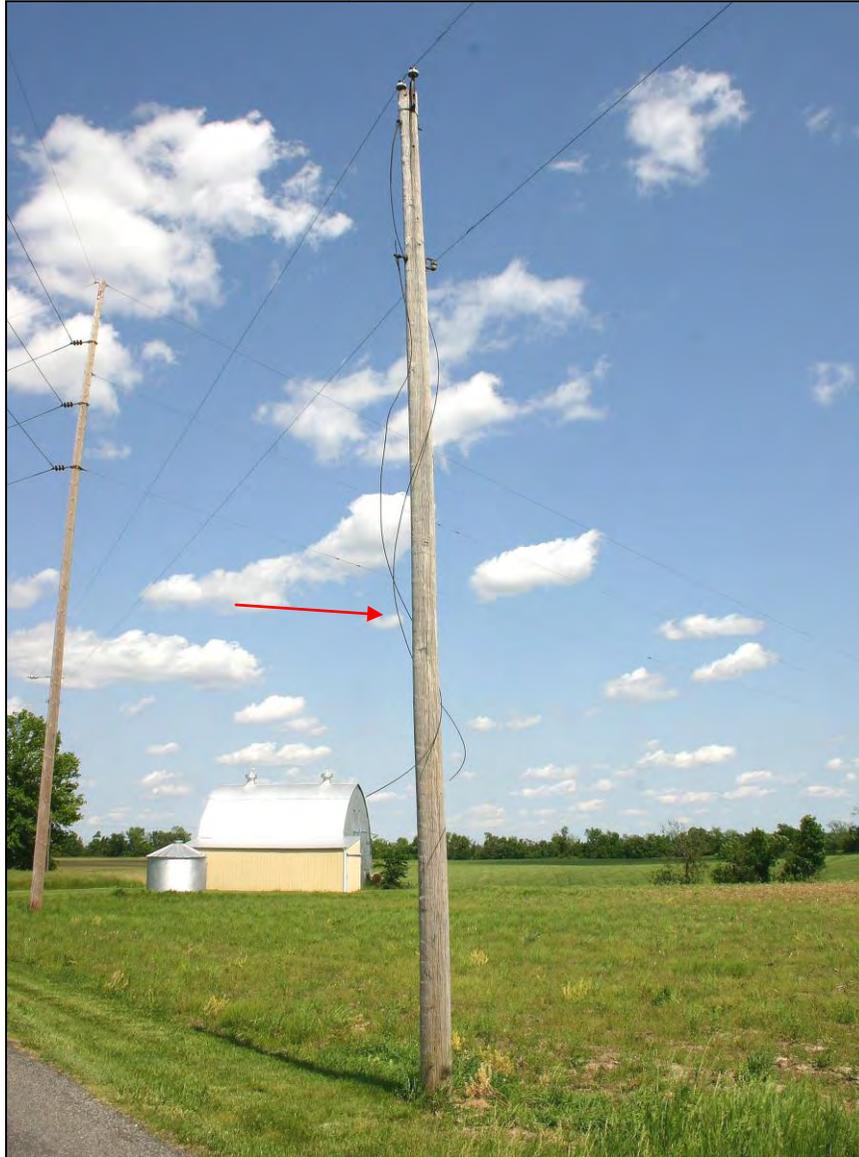
Collinsville 12 kV Circuit K43386 serves an eastern portion of Collinsville and a small rural area east of Collinsville. It was an AmerenIP worst performing circuit in 2006, with a SAIFI of 7.25. Staff inspected this circuit on May 16, 2007, finding that animal guards were plentiful and tree trimming was well done with only one vine problem noted. There were only a few structural problems, including three broken downguys. **Staff noted NESC guying violations at twenty-five (25) locations.** Staff's inspection notes are summarized on Attachment "I". Some parts of the circuit are cross-country, and some of the circuit is underground. AmerenIP reported that weather (87%) and overhead equipment problems (10%) caused most of the interruptions, and said the severe July storms and the November/December ice storm were to blame for the majority of the interruptions. Figures 25 & 26 show two problems found on this circuit, both involving broken downguys.

Figure 25 (Photo 07-IP1489)

**Broken primary downguy (wrapped around pole) and two ungrounded downguys without strain insulators (NESC Guying Violations)
Circuit K43386, Corner of Mary Ellen Ave. & Clifton St., Collinsville**



Figure 26 (Photo 07-IP1490)
Two broken guy wires hanging on pole
Circuit K43386, Clay School Rd., east of Collinsville



Clinton Rt. 54 Circuit K39156 was a next-worst performing AmerenIP 12 kV circuit in 2006, with a SAIFI of 5.02. The circuit serves a northwestern portion of Clinton. Staff's inspection on June 14, 2007, revealed some tree trimming problems and that animal guarding was 50-50. Staff found only two missing guy markers and one other structural problem, but noted **NESC guying violations at five locations before it discontinued looking for them.** Staff's inspection notes are summarized on Attachment "J".

Argenta 12 kV circuit J12166 was another of AmerenIP's next-worst SAIFI circuits in 2006, with a SAIFI of 5.16. This circuit serves Argenta, Oreana, and rural areas between

and near those communities. During its inspection on July 11, 2007, Staff noted that animal guarding was very well done throughout the circuit and that several extra lightning arresters were installed in the rural areas. Staff noted tree trimming problems at twelve locations, and 24 shell rotted poles. There were several mapping errors, and neither Argenta nor Oreana were labeled on the circuit maps provided. **Staff noted NESC guying violations at thirteen (13) locations and one NESC railroad crossing violation.** A summary of Staff's field notes is provided on Attachment "K". Examples of some of the problems on this circuit are shown in Figures 27 through 31.

Figure 27 (Photo 07-IP1730)
Pin oak tree into & burned by primary
Circuit J12166, S. View St., Oreana



Figure 28 (Photo 07-IP1732)

Two ungrounded 12 kV downguys without strain insulators (top downguy in contact with secondary conductor) (NESC Guying Violations)
Circuit J12166, west of Rt. 48, Oreana

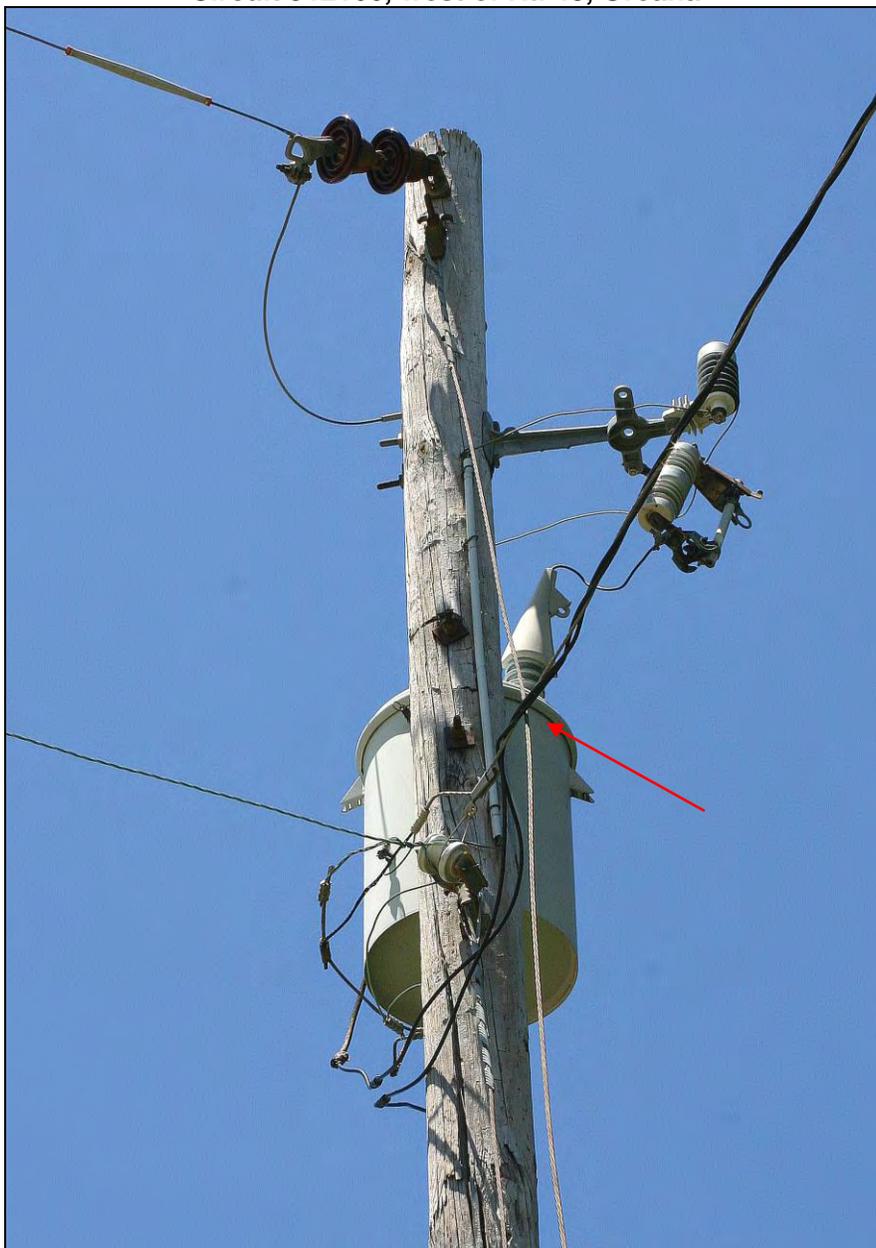


Figure 29 (Photo 07-IP1727)
Bottom pin bolt coming out of pole
Circuit J12166, Conners Rd.,
northeast of Oreana

