

**Figure 30 (Photo 07-IP1726)**  
**Single wood crossarm supporting a single-phase crossing of a railroad**  
**(NESC Railroad Crossing Violation)**  
**Circuit J12166, Wise Rd. west of Rt. 48, southwest of Argenta**

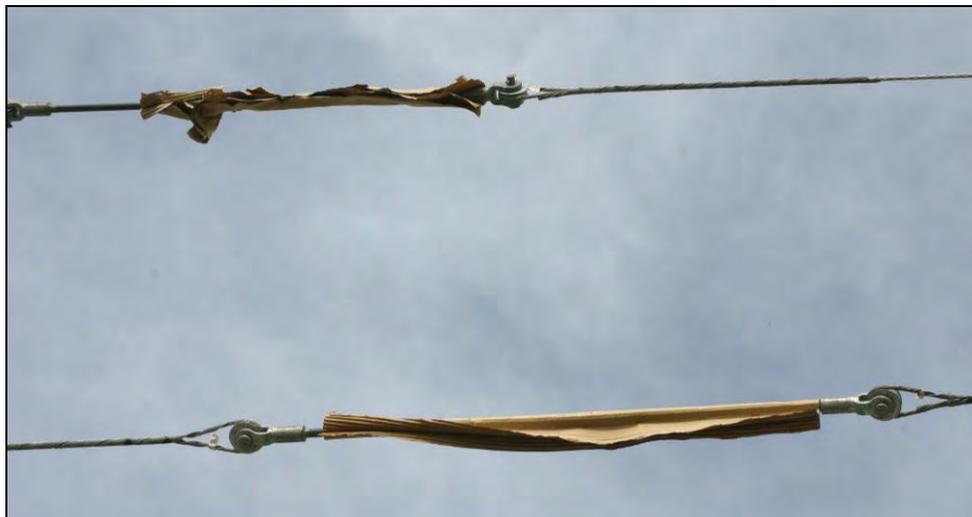


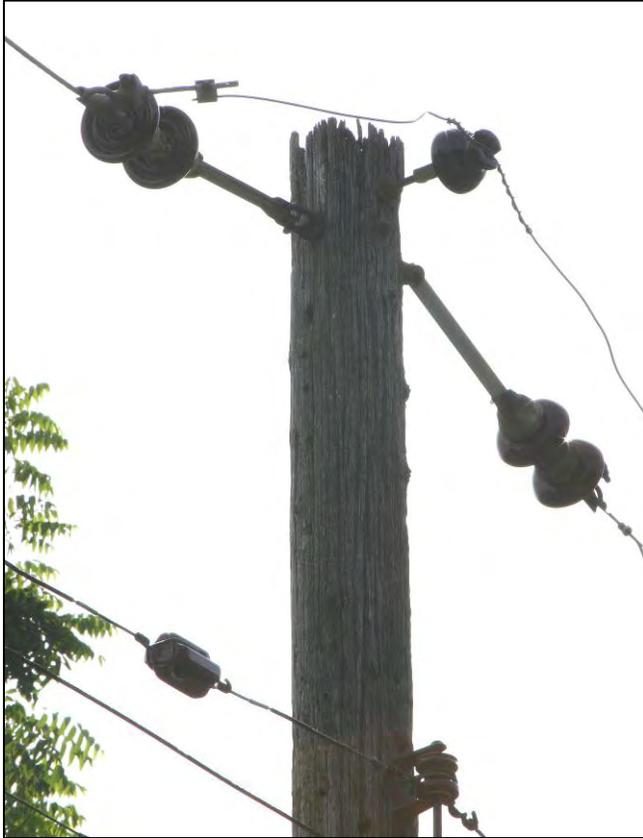
**Figure 31 (Photo 07-IP1723)**  
**Split (lightning damaged) pole top**  
**Circuit J12166, Hampshire Rd.,**  
**north of Argenta**



Morrisonville Circuit P54828, serving Harvel, Raymond, and a rural area between those two communities and north of Harvel, was also an AmerenIP next-worst performing circuit in 2006, with a SAIFI of 5.32. Staff inspected this circuit on July 16, 2007, noting many new poles and crossarms scattered throughout the circuit and few remaining structural problems. Tree trimming was well done. Many animal guards were noted, but more are needed. More lightning arresters are needed in the long rural exposures. *An unusual item found on this circuit was that corrugated paper wrapping material had been left on fiberglass strain insulators in overhead guys at several locations (see Figures 31 & 32), which can compromise the insulating value of the insulators.* Several sections of the circuit were cross-country and not readily accessible for inspection. The towns of Raymond and Harvel were not labeled on three of the circuit maps. **Staff noted NESC guying violations at six (6) locations and one NESC clearance violation.** Staff's inspection notes for this circuit are summarized on Attachment "L", and Figures 32 through 36 show examples of some of the problems found.

**Figures 32 & 33 (Photos 07-IP1744 & 07-IP1745)**  
**Corrugated paper left on fiberglass strain insulators**  
**Circuit P54828, corner of Rd. 2700N & Rd. 800E, northwest of Harvel**





**Figure 34 (Photo 07-IP1746)**  
Badly deteriorated pole top  
Circuit P54828, Main St., Harvel

**Figure 35 (Photo 07-IP1738)**  
Badly lightning damaged, split pole top  
Circuit P54828, Smith (Berrie) St.,  
north of Harvel



**Figure 36 (Photo 07-IP1741)**  
**Badly lightning damaged crossarm & hanging steel brace**  
**Circuit P54828, west of N. 100E Rd. on CH 10, northeast of Harvel**



Staff also performed spot checks of nineteen AmerenIP distribution circuits, two 34 kV substation taps, and another 34 kV line during 2007, consisting of follow-ups on problems noted on ten circuits and the two 34 kV taps during prior-year inspections and new problems discovered on eight AmerenIP circuits and the 34 kV line that are not associated with other circuit inspections performed by ICC Staff. These circuit spot checks are summarized on Attachment “M”. Results were mixed on the follow-ups of prior year problems, with some of the needed corrections made and others not, as indicated on Attachment “M”. ***NESC guying violations that Staff noted in 2006 remained unresolved at three locations where AmerenIP had earlier reported that all corrections had been made.*** Among the new problems Staff discovered on the AmerenIP distribution circuits spot-checked were additional NESC violations at two locations, one involving downguy violations and the other involving the lack of double crossarms at a railroad crossing. Photos of six of the new AmerenIP circuit problems discovered are shown in Figures 37 through 42. See subheading “E” later in this section for more discussion of the types of NESC violations found.

**Figure 37 (Photo 07-IP1267)**  
**Two primary floaters (road side & field side)**  
**Circuit M26164, CH 20 east of Glasgow Rd., east of Warrensburg**



**Figure 38 (Photo 07-IP1273)**  
**Single wood crossarm supporting a single-phase crossing of a railroad**  
**(NESC Railroad Crossing Violation)**  
**Circuit M26164, Rt. 121 at Flanagan Rd., west of Warrensburg**



**Figure 39 (Photo 07-IP1754)**

**Lightning damaged pole top, lightning damaged & split crossarm, & broken ground wire  
Circuit P54827, north of Rd. 200E on Rt. 48, south of Morrisonville**



**Figure 40 (Photo 07-IP1756)**

**Broken wood brace on 34.5 kV line  
Line 3454 (Str. #192), Rt. 108,  
east of Carlinville**



**Figures 41 & 42 (Photos 07-IP1802 & 07-IP1800)**

**Broken crossarm in a single crossarm support of a 3-phase interstate highway crossing  
Circuit M18131, I-72 at exit 133, Harristown**



**Note: AmerenIP refused to install double crossarms at this and some other limited access highway crossings in 2005, claiming grandfathering rights for installations prior to 1984, when the NESC requirement for double crossarms became effective in Illinois. In its reliability assessment report covering AmerenIP's 2004 reliability, Staff stated "*Staff does not believe that AmerenIP's limited action plan is in the best interest of public safety, though it may meet the minimal statutory requirements in Illinois due to the "grandfathering" approach allowed by the safety code.*" Because of AmerenIP's policy, situations at some interstate highway crossings, such as pictured in Figures 41 & 42, have resulted in a danger to public safety. AmerenIP replaced this broken crossarm with new double crossarms promptly when notified of the danger by Staff, but still has not added the second crossarm in many other single arm interstate highway crossing locations (including another one in the median at this same interchange) due to its grandfathering policy. Staff continues to believe this policy is not in the best interest of public safety.**

Staff also discovered additional NESC violations at twelve (12) locations and 22 other circuit problems during its AmerenIP tree trimming inspections in 2007 (see subheading “D”). The summaries of Staff’s field notes covering these problems are included with the tree trimming notes in Attachment “T”. Examples of some of the NESC violations and other circuit problems discovered during Staff’s tree trimming inspections are shown in Figures 43 through 49.

**Figure 43 (Photo 07-IP1634)**  
**Single wood crossarm supporting a 3-phase crossing of a railroad**  
**(NESC Railroad Crossing Violation)**  
**Circuit Q34366, LaSalle St. north of Marquette St., Ottawa**



**Figure 44 (Photo 07-IP1640)**  
**Single wood crossarm (ON NEW POLE) supporting a 3-phase crossing of a railroad**  
**(NESC Railroad Crossing Violation)**  
**Circuit K36251, Alexander Ave. north of Washington St., Clinton**



**Figure 45 (Photo 07-IP1673)**

Inadequate clearance of 12 kV primary over a street light on a skip-span pole  
**(NESC Clearance Violation)**

Circuit P98193, Gregory St. just west of Grove St., Normal



**Figure 46 (Photo 07-IP1705)**

Single wood crossarm supporting a 3-phase crossing of a railroad  
**(NESC Railroad Crossing Violation)**

Circuit L70125, Oregon Ave. between Fairchild & Daniel Sts., Danville



**Figure 47 (Photo 07-IP1788)**  
**Spacer cable spacer off of messenger**  
**South Shores Dr. at Lake Pointe Subdivision entrance, Decatur**



**Figure 48 (Photo 07-IP1771)**  
**Inadequate secondary clearance above ground**  
**(NESC Clearance Violation)**  
**Circuit L24122, CH 30 just west of the entrance to PPG, Mt. Zion**

