

# Heads-Up Communication



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## Priority Ratings of Improperly Installed Cotter Keys

### Purpose

The purpose of this bulletin is to inform SCE and contractor personnel of the proper installation of clevis pins and cotter keys and the appropriate priority ratings for missing and incorrectly installed keys.

### Background

Distribution hardware and insulators are equipped with 5/8" clevis pins with stainless steel humped-style cotter keys. SCE utilizes the humped-style cotter keys to not require any additional modification (e.g., spreading) of the key to remain in place and successfully secure the overall clevis system. For the cotter key to perform as intended, the hump must extend beyond the hole of the clevis pin. See Figure 1 for example.



**Figure 1:** Properly installed clevis pin and cotter key (SAP 10068322)

### **Action**

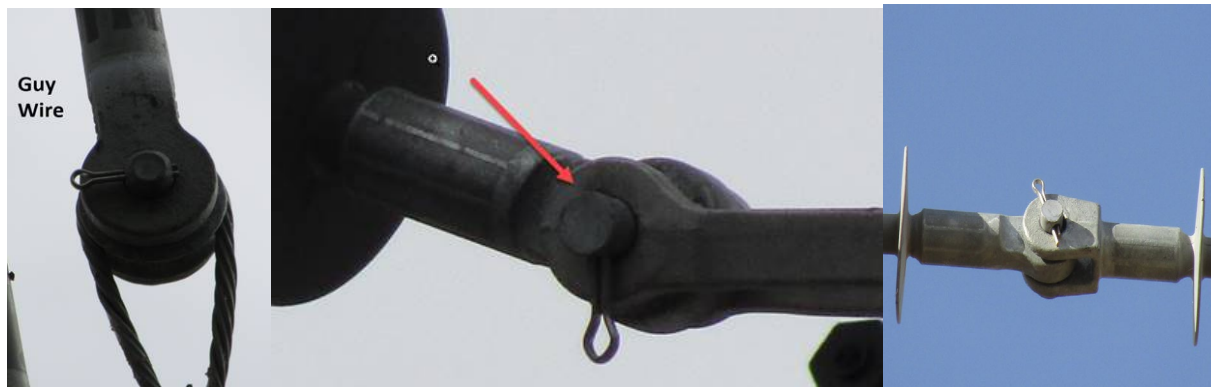
Ensure that cotter keys are appropriately installed by verifying that the hump of the key fully extends outside of the hole of the clevis pin. When required, utilize appropriate hot-sticking tools. Notifications and quality control (QC) observations will be based on the extension of the cotter key hump as imaged in Figure 1 and/or whether the cotter key is present.

The following notification priority levels will be assigned for primary and secondary levels, respectively:

#### **For primary voltage level:**

- Missing cotter key - A priority 1 notification is required.
- Cotter key is incorrectly installed - If the cotter key hump is partially within the clevis hole (i.e., does not fully extend beyond the clevis pin hole), or is otherwise incorrectly installed, the condition is categorized as a Priority 2 (P2) (up to 36-month remediation timeline) based on High-Fire Risk Area (HFRA) or non-HFRA designation.

The notification priorities described above also apply to primary guy installations.



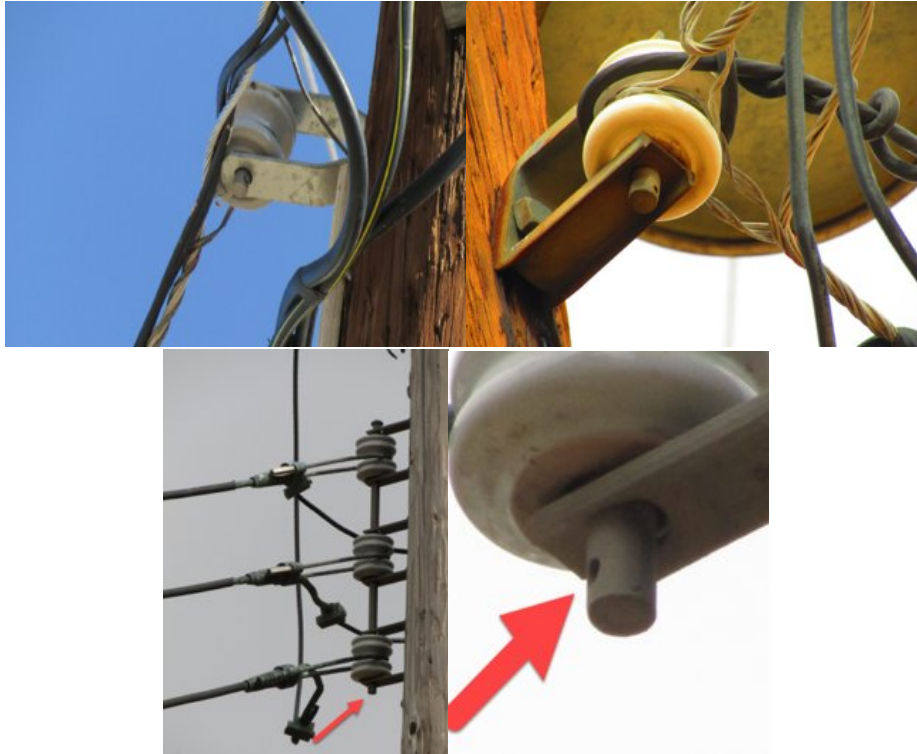
**Figure 2: Incorrectly Installed Cotter Keys (Primary)**



**Figure 3: Example of Missing Cotter Key (Primary)**

For secondary voltage level:

- Missing cotter keys for pins on secondary single spool installations under tension require P2 notification based on HFRA or non-HFRA designation
  - If an extended three-spool rack (SAP 10180846) has any missing cotter keys on the individual pins, P2 notifications are required.
- Missing cotter keys for older three-spool racks (284 racks) where a single pin is used to secure all three insulators require a Priority 3 (P3) notification for correction within 60-months.
- Dislodged or incorrectly installed cotter keys in any instance (including guying) require a P3 notification for correction within 60-months.



**Figure 4: Examples of Incorrectly Installed or Missing Cotter Keys (Secondary)**

**Standards Affected**

Appropriate sections within the Distribution Inspection and Maintenance Manual (DIMP) will be updated based on the information provided in this bulletin.

**Contact Information**

- SCE Employees – Contact [REDACTED] OR [REDACTED]
- Contractors – – If you have questions about this bulletin content or its applicability to your work, contact your Edison Representative, Project General Supervisor (PGS), Inspector, Specialist, Project Superintendent, etc. or Field Safety Advisor