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From: Edward L. Clark, Jr. [ed@theelectricalexpert.com]
Sent: Friday, May 30, 2008 11:20 AM
To: 'Windsor, Howard'; 'mai@cpuc.ca.gov'; 'rst@cpuc.ca.gov'; 'rgf@cpuc.ca.gov'; 'ffd@cpuc.ca.gov'; 'cldavis@sempra.com'; 'Welch, Clay'
Subject: SAFETY WARNING, June 2, Transmission Line 637 Inspection
Attachments: Guy wire requirements.pdf

To all parties associated with Transmission Line 637 inspection scheduled for June 2, 2008. Please advise all participants during the safety meeting of this hazard.

Please put all parties on notice that during the inspection of down guy anchors and down guy attachments that only SDG&E trained high voltage personnel should come in contact, until shunts are applied by SDG&E, for the following reasons:

The down guys are currently tied together with a common bolt on Transmission line 637 that allows for ground current to flow in one anchor and out the other should a system disturbance or fault occur. I have attached a copy of SCE construction methods rule that shows the down guys should be independent of each other, thus preventing current from flowing. Refer to paragraph 6.

Should an inspector or consultant touch one hand on the down guy anchor and the other hand on the down guy, while there is an air gap and a system fault occurs, current could flow into the anchor through his/her arm, through the heart, out the other arm to the down guy, KILLING, OR SERIOUSLY INJURING the person in contact.

Grounding the 69kv primary with the line de-energized DOES NOT PREVENT THIS!!!!

SDG&E employees should take precautions, treat as energized, and shunt the connection between the down guy anchor and down guy to remove the hazard **BEFORE INSPECTORS INSPECT!!!!!!!!!!!!**

Please call me on my cell phone if there are any questions (714) 448-7145

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Where the mechanical loads to be imposed upon the poles are greater than can be safely supported by the poles, additional strength shall be provided by the use of guys. This applies particularly to angles and deadends where the conductor stresses are sufficiently unbalanced to make guying necessary.

No guys shall be attached to trees or other private property, except in special cases. Permission to do so must be obtained in writing from the owner.

Guy wires shall be placed and maintained with clearances from conductors or other wires not less than those specified in Table 1 and 2, General Order 95.

Where required by the rules of G.O. 95, porcelain strain insulators of the interlocking type shall be used in all guys attached to poles.

All guys shall be attached to poles with special hardware designed for the purpose. Preformed guy grips will be used to make up guy heads and strain insulators. *Automatic guy grips are recommended for anchor end of guys.

When two or more guy wires are installed in close proximity to each other, the attachment of one guy shall not overlap that of another, but each shall be entirely independent of the other and at least 12 inches apart at the point of attachment to the pole.

Guys should be installed and adjusted before the conductors are strung so that the pole or crossarm will stand in its proper position when the entire unbalanced stress is taken by the guy.

Wherever possible down guy leads (distance from pole to eye of anchor rod) should be equal to or greater than the height of the guy attachment above ground. If it is impractical to install a satisfactory anchor guy at the deadend pole, the stress may be carried by means of a span guy to an adjacent pole which can be properly guyed.

Power-installed screw anchors (PISA) are the preferred type of anchor to be used in transmission construction.