



Safety Advice 05-2007 (NZ) (b)

The following notice is issued by Powerco to its contractors and is distributed via the EEA Safety Advice system to the electricity supply industry with kind permission of Powerco, for information to those involved with live LV work.



Notice to Contractors

6 July 2007

1. Work on Live LV Overhead Conductors

Attention is drawn to the requirements laid out in the EEA Guide to Live LV Electrical Work, which Powerco has and continues to require its contractors to comply with, as follows: -

“Before commencing work on live LV overhead conductors, an electrical worker shall:

- (a) Wear insulating gloves
 - (i) The minimum class of glove shall be Class 00 – 500 volt working.
 - (ii) Insulating gloves shall be worn at all times whilst aloft
- (b) Cover with insulating material every part of such conductors (except the conductor on which work is being carried out) that could come into contact with any part of the body during the course of the work. If the conductor insulating covering is found to be satisfactory, and if there are no binders, line taps, clamps, preformed terminations and other fittings, then conductor cover up gear need not be used.
 - (i) For the purposes of this requirement, the neutral conductor shall be regarded as a live conductor.”
 - (ii) An assessment of the condition of the conductor insulation or covering should be carried out in planning where additional cover may be required.
- (c) Secondary points of contact are to be identified including any exposed metal in or adjacent to the planned work area. All such points of contact that may present a hazard during live work should be covered up using rated covers, mats, barriers, tubing etc.”

Powerco wishes to remind all contractors carrying out such live LV work that this procedure and its requirements apply **irrespective of the access methods** used to reach the conductors, ie. working from an insulated EPV bucket does **not** remove the need for gloves or to cover up as specified.

2. Testing

Powerco wishes to remind all contractors of the need to strictly follow test procedures at all stages of work. Specifically it reminds all contractors that it is necessary to test between



conductors before attempting to join them to ensure there is no unexpected voltage difference present.

3. **LV Terminations to Distribution Fuse Ways**

Powerco wishes to remind contractors of the need for care when terminating LV cables onto fuse-ways forming distribution panels. This applies particularly to larger cables and where bi-metallic lugs are necessary reducing the clearances between components at the point of bolting to the base of the fuse way.

A case has been identified where, possibly due to later cable movement, the lugs moved and touched, tearing through the single layer of heatshrink insulation that had been applied over the lugs, and resulting in a conductor to conductor fault.

As an interim solution, pending further engineering consideration, Powerco requires that a minimum of two layers of heatshrink be used to cover such LV lugs, this should consist of a standard black layer followed by a coloured phase identification layer. This requirement supersedes all current practices and standards in use on Powerco's network.

Powerco further reminds contractors to check (and re-test) any such terminations if it is found necessary to move the cable after it has been terminated to ensure lugs/cores have not been damaged.

Enquires regarding any of the above issues should be made to Dave Moore, External Works Manager, on phone (07) 928 6010, mobile 027 343 3366.

Issued By:

A handwritten signature in black ink, appearing to read 'Stephen Nicholls', with a long horizontal stroke extending to the right.

Stephen Nicholls
Network Service Delivery Manager
Powerco