



## PROVING DEAD AND EARTHING EXTRA HIGH VOLTAGE SYSTEMS

### OVERVIEW

On the 5<sup>th</sup> of November 2025, while undertaking switching operations at Bolney 132kV Substation, a flexible circuit main earth (CME) was applied to a live 132kV Bus Bar. The resultant flashover caused the operator to be affected by arc eye.

### DETAIL

A Very Serious Investigation is taking place to establish the exact causes, and this alert is without prejudice to that process.

With immediate effect the following 3 actions are to be taken when undertaking works on Extra High Voltage Systems:

- When flexible CMEs are being utilised to earth equipment in a substation, the SAP responsible for their application shall personally supervise their fitment to the earth bar/strap at ground level. The line ends shall only be handled to attach to the rods, by the person applying the earths to the line/bus bar.
- Control Engineers will issue the instruction(s) "Test and Apply Earths" whenever flexible CMEs are to be applied. If no testing is practicable, as stated below, this shall be discussed with the control engineer.
- Prior to applying flexible CMEs, the section of conductor or Bus Bar Shall be tested with an Approved voltage testing device. The special procedure in DSR 4.3.3.b shall only be utilised in exceptional occasions where the use of a tester is not practicable.

### WHAT YOU NEED TO DO

- Ensure you are fully conversant with the three requirements listed in this alert.
- Always use an EHV tester to prove dead before applying flexible CMEs.
- Check your location twice, then check again. Always know exactly where you are on the system and be certain that the operations you are about to take are exactly as intended.
- It is always good practice to check with your switching schedule or logbook that you are in the correct location before carrying out any operation.

To clarify the meaning of the definition of 'where practicable', the DSR definition is shown below:

*Where 'Shall' is qualified only by the word 'practicable' a slightly less strict standard is imposed. It means that where it is possible to achieve in the light of current knowledge and invention, but bearing in mind the hazards associated with the work to be undertaken, then the requirement must be met. One is not allowed to avoid the requirement on the grounds of difficulty, inconvenience or cost.*

<b>Primary communication via Line Manager complete by (X)</b>	<b>X</b>	2 calendar days	5 calendar days	10 calendar days
<b>Additional communication (X)</b>	<b>X</b>	Stand down briefing	1 <sup>st</sup> 15	Team Brief slide

Line management must ensure appropriate employees understand the content of this document within the timescale shown. This document is subject to compliance audits after the communication deadline.