

HV Distribution Equipment



Always test before applying earths or straps.

Brief

- Always prove the testing device before use
- Where possible, reprove the device after use
- Always test each conductor at each location and confirm the conductor is dead before an earth is applied
- On multi-phase systems, all phases should be tested and earthed

This lifesaving rule applies to

- All HV distribution equipment, which includes but is not limited to,
 - Switchgear
 - Transformers
 - Ring main units
 - Cables
 - Bus bars (including aerial bus bars)
 - Adjacent OLE on SMOS sites
 - Other exposed conductors

This lifesaving rule does not apply to

- The application of integral earths

Learning for the future

- Every earth applied to a live conductor shall be formally investigated using the fair culture process
- A Close Call should be raised when a conductor is tested live and it is not expected to be live

Guidance/Notes

- Where manual earths are required to be applied, then an approved test device must be used where continuous live line indication is not provided.
- An approved test device must be used at structured mounted outdoor switchgear (SMOS) and 33kV raft sites, before the application of earths.
- Some older distribution equipment allows earths to be mechanically applied from the control panel without entering the chamber, but do not provide a live line indication on the panel. In such cases, the mechanical earth can be applied after confirming all points of isolation open. The earth should be applied by remote control if possible with staff removed from switchgear vicinity. If this is not possible, then the use of a lanyard should be considered