## CASE STUDY 5

### Background

A worker received a fatal electric shock while fixing current transformers (CTs) at the busbars compartment of a low voltage switchboard.

### Cause of accident

Two moulded case circuit breakers (MCCBs), rated at 500-Amp and 300-Amp respectively, were installed one above the other in the upper compartment of the switchboard; the busbars were located in the lower compartment below the MCCBs. The 500-Amp MCCB was at switched-on position serving some outgoing circuits. The worker was installing CTs for the 300-Amp MCCB at the back of the switchboard with all the live circuits exposed. While fixing the third CT, the worker's shoulder inadvertently came into contact with one of the live terminals of the 500-Amp MCCB and he received a fatal electric shock.

Live terminals of the 500-Amp MCCB were not covered with insulating barrier while work was being carried out at the lower compartment of the panel.

## How this accident could have been prevented?

- The 500-Amp MCCB should have been switched off while work was being carried out on the 300-Amp MCCB below it.

- If switching off the 500-Amp MCCB is not possible or desirable, appropriate insulating barriers should be provided to prevent access to or accidental contact with any of the exposed live parts of the 500-Amp MCCB.