

18-July-2017

Update on event dated  
5 March 2003  
Maximo REF No. N/A

# SAFETY! ALERT!



## Reminder: HAY 2003 11kV Switchgear Accident

### WHAT HAPPENED?

This Alert serves to remind the the industry of corrective actions taken following the HAY 2003 11kV switchgear accident.

The rear cable connection panel of an 11kV indoor switchboard panel was removed while the unit was live. A Flashover occurred when the two Electrical fitters accessed the live unit causing one fatality and a serious injury to the other.

The switchboard had been newly commissioned the previous day. The unit on which the Flashover occurred was to be worked on that day but had not yet had an access permit issued. The Access Permit was in the process of being issued at the time of the incident.



### ACTIONS TAKEN FOLLOWING THE EVENT

- First Aid for burns improved with introduction of burn showers and gel blankets.
- Magnetic Access Permit markers introduced for indoor switchgear.
- Newly commissioned equipment notice reviewed SM-EI and TP.SS 07.31 (now TP.SS 80.01)
- Industry reminder notices released for marking permit areas; test before touch; newly commissioned equipment notices; work party communications; access permits.
- Full cover PPE mandated for all workers.

### SUBSEQUENT IMPROVEMENTS

- Full cover FR rated (8 Cal) PPE introduced company wide and 40 Cal switching suits provided when operating indoor switchgear.
- Full arc containment and external venting introduced to switchgear purchase spec.
- Arc flash detection added to purchase spec with a retrofit programme for existing equipment.
- Fast acting buszone and CB fail protection added for new switchgear and a retrofit programme for older switchgear.
- Preference for purchase of non withdrawable fixed pattern maintenance free switchgear, or arc contained panels on 11kV where switchgear is still withdrawable.
- Plug-in style cable terminations that are fully insulated.
- Keys to life introduced for all works.

### LEARNINGS

Parties involved in commissioning work on indoor switchgear should understand the importance of, and ensure that they are:

- Observing industry controls for the release of equipment; Isolate, lock, tag and earth
- Following the Keys to Life; live until proven dead
- Marking permit areas in accordance with SM-EI Rules 3.413 and 3.707 (this includes magnetic markers on indoor switchgear)
- Managing equipment commissioning in accordance with TP.SS 08.01