

Safety Alert



Significant ARC Flash Injury

Incident Overview

A planned survey of the outgoing busbars in an existing Mains/Generator Site Incomer Panel was being carried out by the control panel manufacturer on behalf of Bridges. The survey was necessary to design site-based modifications required at a later date.

The Mains and Generator incomer ACB's had been withdrawn, isolating the outgoing busbars mechanically and electrically. The mains incomer feed remained live.

The survey was to be undertaken of the outgoing busbar only. A permit to work was issued stating the points of isolation and the IP signed to accept the permit.

At approximately 10:05 a loud bang was heard by persons on site. The IP who had been carrying out the survey had suffered electrical burns to the right hand and forearm and was initially given first aid treatment at site but then transferred by ambulance to hospital. He remained in hospital for two nights and has since returned home.



What We Understand May Have Happened

The incident is still under investigation however, when the power supply to site had been isolated, inspection of the IP's work area commenced. This showed that one of the rear panels to the Mains / Generator Incomer section had also been partially removed, in addition to the outgoing side busbar cover which was planned. The rear cover gave access to the `live` mains incomer section of the panel. On closer inspection of the mains incomer bus bars it was noted that the end of a tape measure was stuck to the L1 busbar and arc burns were noted on L1 and L2 busbars (see photo above)

From this it is thought that the IP may have attempted to take a measurement in this area, and the metal tape measure contacted L1 live busbar. This would be supported by the burn injuries to the IP's hand and forearm.

From the IP's statement, it would appear that he became distracted and carried out additional survey activities outside of the planned and agreed tasks. This activity was unplanned and outside of the permit to work and agreed RAMs.

Initial Learning

The IP completed the planned work but felt this was insufficient and chose to undertake additional unplanned activities. At this point **the IP failed to STOP work!**

All staff are reminded that unplanned work is NOT permitted, and it is NOT permitted to deviate from Permits & RAMS under any circumstances.