



# SAFETY BULLETIN

LV ARC FLASH IN ZONE SUB AC PANEL

Issued: 11 Oct 2018

| Number: 26-18

## What is the issue?

A Low Voltage arc fault occurred in a Zone Substation AC panel when installing a switchgear heater supply. As the earth wire was being fed through the panel, inadvertent contact was made with the main active terminal creating the arc flash.

The substation technician, although wearing all appropriate PPE, received minor singeing to hair and eyebrows, but was otherwise unharmed.

After an immediate assessment of the technician's condition by the site coordinator, no medical treatment was deemed necessary. The site coordinator proceeded to make the site safe and restore supply.

## What has been done?

An ICAM into the incident has been initiated to determine how a recurrence of a similar event can be avoided.

## What you need to do

As per the Electrical Safety Rules, "care shall be taken to ensure inadvertent contact is not made with live exposed conductors".

Where de-energised work on LV apparatus is not practical, further controls to minimize the risk of inadvertent contact with electricity must be implemented. This includes:

- Ensuring conductors are appropriately covered and insulation remains intact until terminated (refer example at image 3);
- Outer sheathing is only stripped as far as is required;
- Exposed conductive parts of the apparatus are covered with insulating mats; and
- The use of covered tools and appropriate PPE, including approved eye protection and LV insulating gloves with approved leather outers.

## Contact

For further details:

Steve Dent, Acting Transmission Manager South – 0427 205 892

Matt Pandelus, Acting Ops Mgr Trans Subs – 0400 365 005

Matt French, Electrical Safety Business Partner – 0466 554 267

## Related documents

Electrical Safety Rules

GSY1066 – Worksite Hazard and Risk Assessment

GAM0108 – Live Low Voltage Work Safety

SWMS 2.009 – Panel Wiring and Modifications

Image 1: Representation of AC panel with LV insulating mat in place.

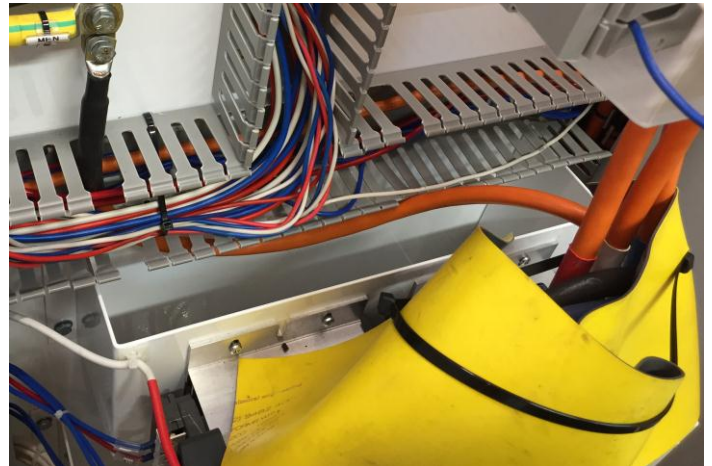


Image 2: The LV terminals which the exposed earth cable contacted

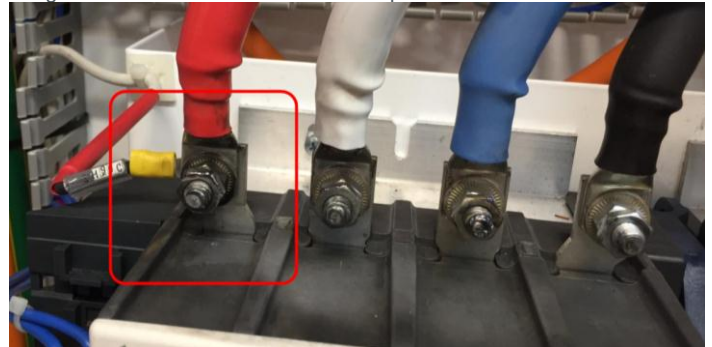
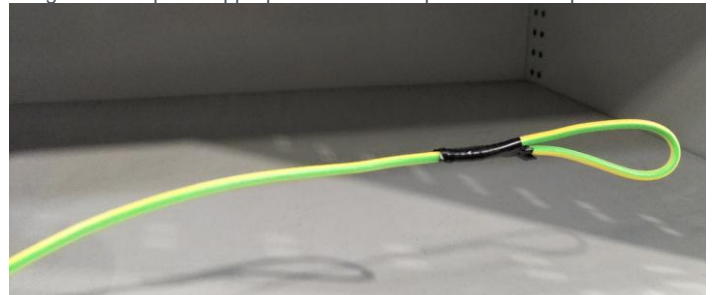


Image 3: Example of appropriate cover and protection of exposed end



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Owner: Steve Dent, Acting Transmission Manager South  
Approver: Grant Gillard, Acting Manager HSE Assurance and Improvements  
Expiry Date: 12 months from date of issue