

ASP Safety Alert

ASP Compliance and Practices



Alert Number: SA15_17

4th December 2017

Subject: Low voltage short circuit while tightening terminal on OH link box.

Key Messages

Where working on exposed live low voltage mains and apparatus, all workers must;

- **Adhere to the requirements of Ausgrid's Electrical Safety Rules at all times**
- **Be trained and authorised to complete the work being undertaken**
- **Complete a pre-job risk assessment ensuring work can be carried out safely**
- **Utilise a suitable Safe Work Method Statement (SWMS) which is fit for purpose**
- **Wear appropriate personal protective equipment (PPE)**
- **Implement approved control measures to eliminate danger from accidental contact with other live conductors, neutral conductors or earth**

Background

During live low voltage (LV) bonding works on Ausgrid's electrical network, an ASP1 utilised uninsulated tools and unapproved work methods which resulted in two low voltage phases being short circuited.

The works involved installation of a 3 phase fuse/link disconnecter between new LV overhead conductors and existing UGOH cables. Works were being performed as part of the commissioning process where the UGOH was electrified under a Clearance to Work (CTW) permit.

During phasing works, termination of phase B was identified as being potentially loose. The ASP1 has then proceeded to further tension the termination whilst other exposed phase connections were present.

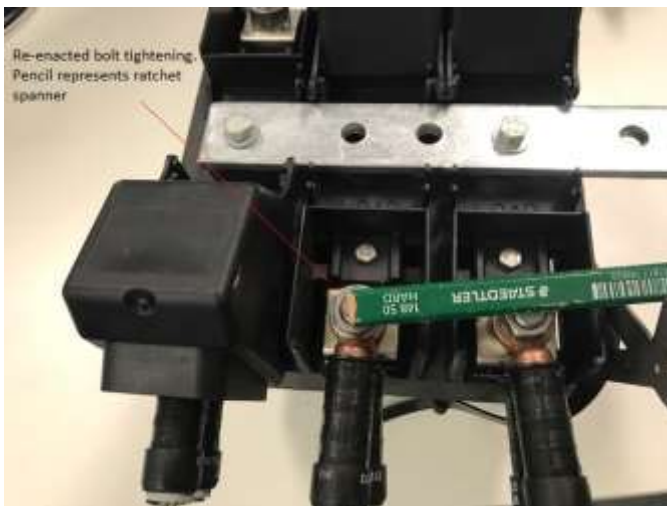
Route Cause

In performing tensioning works two termination covers were removed simultaneously exposing multiple phase connections. Utilising an uninsulated spanner, the ASP1 then proceeded to tension B phase termination nut inadvertently creating an electrical bridge between the B & C phase terminations with the uninsulated spanner.

Factors contributing to the low voltage short include the workers failure to comply with the requirements detailed in the ASP's documented work methods (SWMS) and Ausgrid's Electrical Safety Rules clause 9.5.1;

"Have you followed approved precautions to avoid danger from accidental contact with other live conductors, neutral conductors or earth (ie followed an approved SWMS)"

To prevent accidental bridging of live terminals, the ASP SWMS required each phase connection to be individually installed and tensioned whilst terminal covers remained installed on all other phases.



Recommendation / Actions

This incident could have resulted in more significant impacts to the workers involved. ASP's are requested to remind all staff of the dangers associated with live electrical works. All work methods and practices must comply with Ausgrid's Electrical Safety Rules and applicable SWMS's.

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Project Officers