

Safety Notice

Notice to all network stakeholders.

Re-Issue 20 | April 2026

Phase to Earth short between fuse base plate busbar bracket and Unistrut support

What happened?

In the last two years two LV flashovers have been recorded across the Powerco network which had similar contributing factors. Both recorded in the transformer LV cubicle. This has prompted an in-depth investigation to assess the risk.



185mm fuse carrier 100mm fuse carrier.



Potential arc flashpoint

Why did this occur?

- New vertical disconnects were required to be installed into an LV panel.
- The LV panel had mounting hole spacings of 185mm whereas the chosen disconnect had mounting hole spacings of 100mm.
- In order to install the disconnects with 100mm spacings a dropper bracket made of a conductive material was fitted to the busbar.
- The use of the dropper bracket from the LV busbar to the 100mm disconnect left minimal clearance between the dropper bracket connected to the red phase, and the earthed Unistrut mounting rail below.
- During the act of livening, the force applied to close the disconnect resulted in the dropper bracket flexing and coming into contact with the earthed Unistrut mounting rail below. This created a short circuit between the busbar and earthed Unistrut mounting rail, resulting in a flashover event.

Steps to remain safe:

- Do not operate energised LV disconnects that have a different hole spacing to the panel they are mounted to
- When visiting Powerco assets which have a 185mm centre bus spacing, seek to identify if it has the smaller DIN00 type 100mm fuse carrier installed. If this is observed, do not perform any connect/disconnect operations on the identified LV disconnect while energised.
- Create and log a Red Defect for the smaller type fuse carriers to be replaced.
- Pronutec fuse disconnectors are not approved for use within transformer LV cubicles on the Powerco network.
- Powerco standard 393S109B will be updated and published.

Please share with all staff

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