

HV Permit Process Failure

What Happened?

During the commissioning of G2 11kV switchgear cubicle and circuit breaker, three tagged earthing leads were inadvertently left connected to the G2 11kV terminations on the Local Services

Transformer. This resulted in blown fuses. The earths were subsequently removed, and the project engineering team was contacted to source replacement fuses to restore the asset to full operational readiness.



Key Issues Identified

Isolation and Earthing

- The presence of multiple permits and isolations contributed to confusion and resulted in temporary earths not being identified for removal. Leading towards an unclear handover from the team completing the isolations and earthing process as part of the original operating order.
- Visibility of applied earths was not clear when the site team completing the commissioning completed a walk around to check them.
- Although labelling and documentation clarity did not directly cause the oversight, their improvement was highlighted as essential to avoid future occurrences.

Learnings

- Single Line Diagrams: All HV permits will incorporate up-to-date Single Line Diagrams clearly indicating the position of applied earths, with P&IDs attached directly to permits
- Labelling: A robust labelling system for temporary earths and critical components will be implemented, ensuring unique and clear identification.
- Training and Competency: PER and PEG HSW management will continue to conduct monthly reviews of completed permits and operating orders to reinforce process compliance and improve staff competence.

Actions

- Update the permit procedure to mandate the inclusion of site-specific Single Line Diagrams where relevant.
- C Enhance the labelling protocol to clearly and distinctly identify temporary earth connections.
- Distribute a safety alert company-wide to communicate key learnings from this event clearly and promptly.

For further details, please contact: Alysha McArthur, Group HSW Advisor. Email <u>hsw@pioneerenergy.co.nz</u> or Cell 021 984 921

Safety Alerts are advisory only and contain limited information on an event which has been investigated and reported. The key findings of the investigation are published as a Safety Alert to highlight the key learnings from the event.

