

What happened

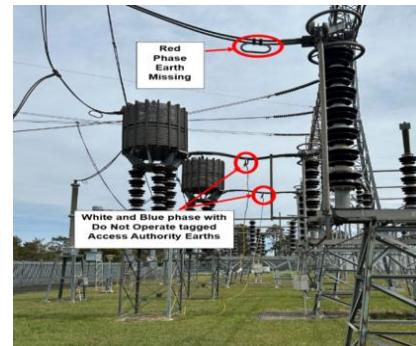
- > On 26 September 2025, a HV Field Operator was conducting switching under a High Voltage Preparation and Restoration Instruction (HVPRI) at Sydney South substation (SYS) on Line 76 (SYS to Wallerawang).
- > As part of the switching, an earthing step was not completed correctly and resulted in only two phases being earthed (white and blue phase). The red phase remained unearthing.
- > On 27 September 2025, a work party discovered the missing earth while carrying out switching/outage work and associated maintenance.
- > The incident was immediately reported to the Field Coordinator / Field Manager who liaised with System Operations to remove line workers and undertake switching steps to apply the missing portable earth.
- > No injuries were suffered and no asset damage was encountered.
- > An ICAM investigation was commenced.

Investigation Findings

Direct Cause: Portable earths were only applied to two phases – This appears to stem from limited understanding and gaps in communication. The task was not performed to the required standard due to insufficient information, training, instruction, and supervision.

Contributing Factors

- > Lack of knowledge regarding application of portable earths.
- > The third (unearthed) phase did not have a wave trap – creating confusion.
- > Ineffective communication regarding switching step.



Lessons Learnt

Positive Findings

- > Field Operator sought assistance when unsure about a switching step.
- > Excellent hazard identification by the work party to spot the missing portable earth.
- > Great response from field crew and System Operations to rectify the issue.

Lessons Learnt

- > Earthing is completed in a set of three (each phase), unless a unique situation exists.
- > Clear communication is crucial to ensure there is no doubt or ambiguity, especially when completing switching/earthing steps.
- > Opportunities for improvement are present regarding training delivered for HV Field Operators.

Outcomes

Corrective Actions

- > Lessons learnt webinar with recent electrical incidents.
- > Update guidelines and process relating to operational communications.
- > Review the Field / System Operator training programs.
- > Review communication protocols.

What do I need to do?

- > Ensure you ask colleagues, leaders or other experienced personnel for assistance when appropriate.
- > Seek further training if you're not confident completing a task.
- > Rushing tasks or activities can lead to avoidable mistakes.
- > Confirm information given & received to avoid ambiguity.