



Incorrect Earths Removed

WHAT HAPPENED?

An Operator instructed 2 assisting team members to remove the wrong set of issuer applied earths during a partial restoration of substation equipment, which included leaving the line out of service. Part way through the sequence the Operator and one of the other workers identified that the correct set of earths to be removed were still in position. This section should have been free from earths prior to it being livened. As the protection was in service, and livening was to be completed remotely, there was no danger to personnel or equipment.

ACTION TAKEN

The work stopped and NGOC were notified of the impending delays. The team checked the status of the equipment, earths and active / logged documentation. They also organised additional advice and assistance to review the issues that had taken place and plan corrective actions.

ROOT CAUSE

- The operational sequence was read correctly however, the Operator misidentified the physical set of earths to be removed.
- There may have been an element of distraction, as extra people had interacted with the Operator during the switching sequence.
- The Operator was not the original Operator that applied the earths on the original sequence the previous week. They did not realise that two sets of issuer applied temporary earths were applied and only one set was referenced on their sequence.
- Possible fatigue from the full day's work at another substation.
- Running slightly late and trying to meet the deadline outage return time- self-imposed pressure.

LEARNINGS

- Always take the necessary time to fully understand the status of the equipment you are performing High Voltage switching on. Prepare and plan the work correctly.
- Always recheck the sequence item statement to the equipment location before carrying out that action.
- Remove or limit distractions to a minimum to help maintain optimum focus during switching activities.

Name	Don Simms
Position	Service Delivery Manger
Mobile	021 359 124
Email	don.simms@transpower.co.nz
Maximo Ref	175652
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