



FIRST ALERT

Date: 6 May 2016

Maximo Reference: 91394

Equipotential Bonding

EVENT

During routine maintenance at Tangiwai Substation a site audit identified unsafe bonding practices associated with bonding of mobile plant to the earth grid. The operator plate and EWP/station earth had been connected in series. Correct bonding is required to create a safe equipotential zone for the work party. Correct Earthing arrangement is shown below.



Operator plate independently connected to MEWP
(TP SS 07.24 diagram F2)

Earth bond/lead from MEWP to station earth

IMMEDIATE ACTIONS

- The work was temporarily suspended until the earthing was rearranged as per the service specifications TP SS.07.24 and the SMEI Part 3, Section 6 (Isolation and Earthing for work on HV Electrical Equipment).
- Bonding corrected to comply with Transpower Service Specifications and to make the work site safe.
- Discussions held at the monthly team meetings highlighting the importance of correct bonding practices.
- Mike Taylor (Consultant) has been engaged to run earthing refresher sessions with teams to reiterate Transpowers requirements and highlight good safety practices.