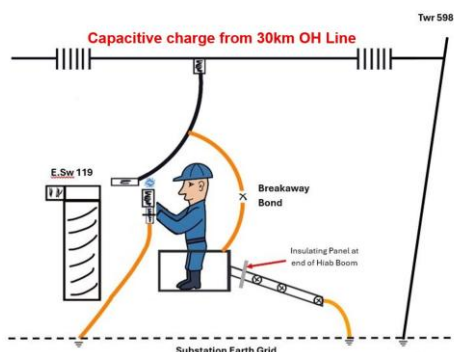




EWP Insulated Bucket Hazard

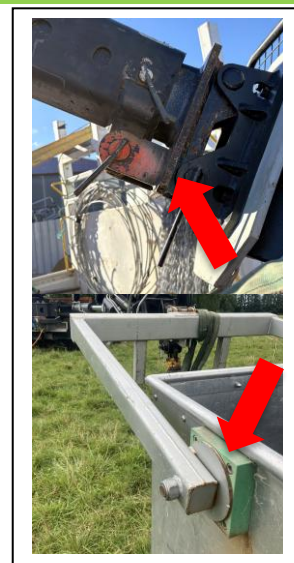
WHAT HAPPENED?



A transmission line mechanic received an induction shock while repositioning a portable earth on a de-energised transmission line.

The investigation identified an unrecognised insulated panel fitted between the EWP boom and personnel bucket. This insulated component prevented the worker and bucket from

remaining within the intended equipotential zone, allowing a voltage difference to develop and resulting in an induction shock when contact was made with a portable earth connected to the substation earth grid.



Potential consequence: Serious injury or fatal electric shock.

IMMEDIATE ACTION TAKEN

- EWPs fitted with insulated personnel buckets must not be used for de-energised work on transmission assets.
- Palfinger NZ (the supplier of this personnel bucket) has approved the removal of the 1000V insulated panel from affected personnel buckets.
- A survey is underway across all Transpower Service Providers to better understand the extent of insulated personnel buckets in use within the industry.

KEYLEARNINGS

- Insulation in mobile plant, such as an insulator between the boom and personnel bucket of an EWP, can adversely affect earthing and equipotential bonding arrangements when working on de-energised transmission equipment.
- Earthing plans must be created and followed for all de-energised work
- Rescue plans must be in place when EWPs are used to ensure workers can be returned safely to the ground should the EWP become inoperable due to hydraulic, mechanical, or electrical failure.
- Dedicated earthing points must be used for all mobile plant. Refer to Safety Start "Mobile Plant Earthing & Equipotential Bonding Lead Attachment Points" (2 October 2019).

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