

VESI Work Practices Committee Memorandum

To:	All Victorian Distribution Lineworkers
CC:	Energy Safe Victoria (ESV)
From:	VESI Work Practices Committee
Date:	October 2014
Subject:	Working On Overhead Substation LV Bus Conductors Live

Background:

The VESI Work Practices Committee (WPC) is a working group with the primary purpose of providing a forum to establish common and agreed outcomes for work practices within the VESI Distribution businesses.

The objectives of the WPC are to, for the VESI Distribution Networks:

- Provide information and guidance on key work practice principles,
- Review and monitor,
- Where required, develop agreed principles and guidelines relating to work practices.

Documents will not carry the VESI logo unless agreed and applicable to all Victorian Distribution Businesses.

Introduction:

A work practice query has been raised in relation to working on distribution Low Voltage (LV) overhead substation bus conductors live. The particular arrangement is where a transformer has blade isolators feeding overhead conductors to fused isolators, one pole each side of the transformer. This substation LV bus conductor arrangement is not fused.

A common misunderstanding exists that LV fusing will offer Field Workers complete protection in the advent of an electrical incident.

LV fusing arrangements for substations are designed primarily to protect the transformer from current surges, overloads and short circuit events (phase to phase and phase to neutral). The primary purpose of LV fuses is to protect the network asset.



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The design of infrastructure (e.g. clearances), live work techniques, training, safety procedures, guidelines and insulated equipment all act as the primary safety controls for live work.

Required Standard Practice:

Work on all live distribution LV overhead apparatus is required to be performed in accordance with the following references:

- Electrical Safety Rules for the Distribution Networks - The Green Book
- VESI Field Workers Hand Book.
- other Distribution Network Operator requirements

In accordance with the above references, live work can be undertaken on LV overhead substation bus conductors using the following precautions:

- Only appropriately trained and qualified Field Workers who have currency of assessment in Live Low Voltage (LV) Work – Overhead. (or apprentices who have been assessed as competent) shall perform live LV overhead work;
- Assess the task to be undertaken ensuring that it can be performed safely using live work techniques;
- Completion of a site Job Safety Analysis (JSA) referencing the appropriate Safe Work Method Statements (SWMS) in regards to live work;
- Application of correct PPE, e.g. LV gloves;
- Use of a Safety Observer;
- Use of appropriately rated cover-up equipment, e.g. mats, protective sleeving and hard covers as required;
- Maintaining personal separation (no second point of contact).

Additional information

As Network design principles may change it is important to reaffirm any VESI Work Practices memorandum on a regular basis with the relative Distribution Network Operators Work Practices Group.

For further information on the above please consult with the relative Distribution Network Operators Work Practices group.

Regards

VESI Works Practice Committee