

Low Voltage conductor clash

Vegetation management work - issued February 2021



Safety alert

Background

Earlier this year vegetation management workers were pruning nature strip trees on behalf of a municipal council. The work was being performed from an Elevated Work Platform (EWP) and a Safety Observer was being used for this work.

The EWP Operator was pruning a tree below the uninsulated LV conductors, they step cut a branch and snapped it off. As the branch snapped the tree shook and a separate branch, which was growing between the LV conductors, moved resulting in the clashing of two LV conductors.

This created an unsafe electrical situation with the potential to cause property damage, serious personal injury or in the worst circumstance an electrocution. Fortunately, no one was injured.

Investigation findings

ESV conducted an investigation of this incident and found the vegetation management workers:

- failed to identify the branch growing between the two LV conductors as a hazard at the site,
- did not conduct a risk assessment of the vegetation contacting live LV conductors prior to cutting,
- failed to determine control measures to manage the risks from the vegetation growing between the LV conductors, and
- did not implement precautionary actions to control the hazards, to ensure the work was performed safely.

The combination of these failures meant the crew members did not comply with the ESV Electrical Safety Rules for Vegetation Management Work near Overhead Powerlines by Non-Electrical Workers, constituting a breach of Electricity Safety legislation; heavy penalties may be applied to such breaches.

Key lessons

- Always maintain appropriate safe approach distances (SADs) when undertaking works in the vicinity of live electrical apparatus.
- Regularly reassess each worksite for hazards when completing electric line clearance work.
- Ensure all site hazards are identified and actions to control the hazards are implemented.
- Ensure the Safety Observer is positioned at a suitable location to effectively observe the work being performed.

Important information

- Failing to identify hazards at the work site will place workers at risk of serious personal injury or in the worst circumstance, electrocution.
- Ensure each individual work site is assessed for hazards and controls are implemented to manage risks.
- When a vegetation management worker is clearing vegetation on behalf of a municipal council they must comply with the ESV Electrical Safety Rules. The rules specify the SAD for vegetation clearance to a bare LV conductor is *'No Clearance Required'*; where note 4 states, *'vegetation contacting live LV conductors may be cut only after a risk assessment has been performed and precautionary actions are taken to control hazards to ensure that the work can be performed safely'*.
- Working near live high and low voltage electric lines is dangerous. A vegetation management worker was electrocuted in February 2019 when they made contact with uninsulated low voltage electric lines.

Who we are

We are Victoria's safety regulator for electricity, gas and pipelines.

Our role is to ensure Victorian gas and electricity industries are safe and meet community expectations. We are also responsible for licensing and registering electricians, and educating the community about energy safety.

More information is available on the Energy Safe Victoria website: www.esv.vic.gov.au

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