

Heading 1

ESV Main subheading

Safety alert

Background

Vegetation management workers were pruning a tree on behalf of an electricity distribution business in a hazardous bushfire risk area as part of a cyclical electric line clearance program. The work was being performed by a vegetation management worker operating a Jarraff tree trimmer similar to that pictured below, example pictured.



The Jarraff operator was intending to trim a small branch from the side of a larger branch located at a height estimated to be approximately 18m from ground level. As he was operating the Jarraff with the boom extended the wind blew the larger branch against the cutting blade.

As a consequence a section of the branch approximately 4.5m in length was unintentionally cut and fell in an uncontrolled manner onto the adjacent high voltage (HV) conductor. The HV conductor broke at the point of contact and then fell to the ground. The operator remained in the machine with the ends of the broken conductor on the ground either side of the machine until it was determined safe for him to exit the cabin.

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

The incident was reported to the electricity distribution business and to Energy Safe Victoria (ESV).

Investigation Findings

ESV conducted an investigation of this incident and found:

- the crew did not identify and outline control measures to ensure the work could be completed safely following the change in weather conditions
- the Jarraff operator failed to maintain the vegetation Safe Approach Distance (SAD) to uninsulated HV conductors when he pruned the tree
- the crew did not identify and outline control measures to ensure the work could be completed safely.

ESV's view is that the combination of these failures resulted in a breach of Electricity Safety legislation; heavy penalties may be applied to such breaches.

Key Lessons

- Ensure all site hazards are identified and actions to control the hazards are implemented
- Continually monitor site and environmental conditions and adjust work sequences and practices to adapt to changing conditions
- If necessary, cease work when hazards change and wait until it is safe to continue
- Always maintain appropriate SADs when undertaking works in the vicinity of live electrical apparatus
- Regularly reassess each worksite for hazards when completing electric line clearance work

Important information

- Failing to identify hazards at a 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; this should be an ongoing process throughout the work task to adapt to changing conditions
- Working near live high and low voltage electric lines is equally dangerous. A vegetation management worker was electrocuted in February 2019 when they made contact with uninsulated low voltage electric lines.

Enforcement outcomes

Having completed its investigation of this incident it is ESV's view that the minimum clearances from the electric line, as required by the Electricity Safety (General) Regulations 2019, were not maintained. Failing to maintain the minimum clearance is a breach of the regulations.

- ESV's view is that the Jarraff operator failed to ensure the tree he was pruning maintained the required clearance from the electric line, which is a breach of Electricity Safety (General) Regulations
- ESV's view is that the Jarraff operator interfered with protected infrastructure, which is a breach of the Electricity Safety (General) Regulations.

ESV may choose to prosecute or take other enforcement action where it considers a breach of the Electricity Safety Act 1998 or Electricity Safety Regulations has occurred. Heavy penalties may be applied.

Who we are

ESV is Victoria's independent safety regulator for electricity, gas and pipelines. Our role is to ensure Victorian gas and electricity industries are safe and meet community expectations.

A function of ESV is to investigate events or incidents that have implications for electricity safety, and to identify if the incidents have occurred due to breaches of electricity safety legislation.

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