CICA – Vic / Tas Branch
Crane Safety Bulletin
#285 May 2021

Greetings all,

Today's Bulletin is about Zones for operating cranes near powerlines.

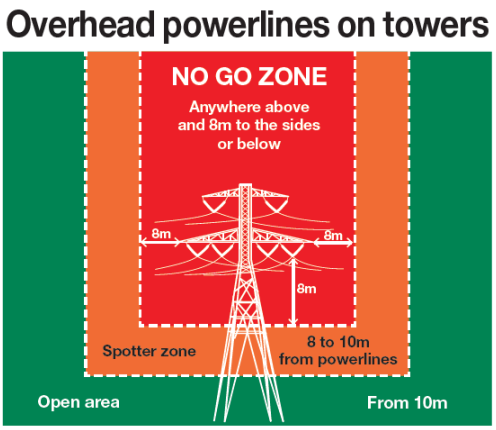
Since November 2020, one worker has died and five others were taken to hospital with serious injuries, after their machinery came into contact with powerlines. WorkSafe Victoria have issued a safety warning to provide guidance on control measures that should be considered to avoid contact when using trucks and other mobile plants near powerlines which can be found here.

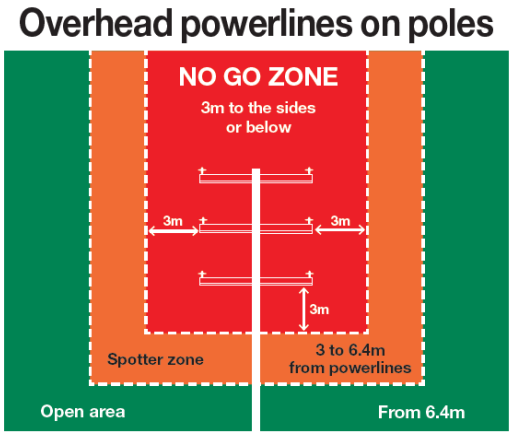
Powerline contact is the largest single cause of fatalities associated with cranes. This topic has been addressed in previous CICA Safety bulletins and there are numerous resources available on the CICA website and by electricity providers.

The CICA 'Cranes Working around Powerlines video', can be found here.

Recently, Energy Safe Victoria released a new awareness poster which clearly depicts *No Go* and *Exclusion Zones*. This poster specifies *No Go Zones* for distribution overhead powerlines (overhead powerlines on poles include electrical overhead lines for traction assets such as trains and trams) and transmission lines (installed on towers or steel poles, they are typically installed in easements and permission is required before any work can be undertaken on the easement).

The *No Go Zone* rules describe minimum safety requirements that are dependent on the distance between overhead powerlines and the work being performed.





When considering proximity of crane operation, one must be aware that crane operation includes where the crane is set up, but also includes where the load is picked up and where the boom is slewed. If any of these operations got into the *No Go Zone* or the Spotter Zone, then effective control measures are necessary.

Weather conditions can also affect operation zones as well, powerlines can sag in extreme heat and sway in strong winds.

If operation inside the *No Go Zone* or the *Spotter Zone* is necessary, isolating the powerline is the best solution and will eliminate the hazard and risk from the source.

Where appropriate, limiting devices should be fitted to cranes to prevent the crane jib from contacting the power line or entering the danger zone. However, be aware that limiting device are generally more suitable for tower cranes than mobile cranes.

If elimination or engineering control are not possible, then:

The normal cycle of operation should be slowed down to increase reaction time for assessing risks.

Visual aids such as tiger tails, attached by the power supplier and made of non-conductive material should be tied to aid visibility of the power lines, and

A registered spotter (see Bulletin 238 on Spotters) should be appointed to alert and warn the crane operator should the crane or the load approach the boundary of the Spotter Zone or the No Go Zone.

Stay Safe - CICA