Electricity and viticulture





What should I do before starting any work on a property?

- > Know the location of powerlines on the property and their proximity to your work
- > Provide workers with accurate, up-to-date maps/ diagrams showing the location of powerlines on the property, also indicating safe traffic paths to eliminate the possibility of powerline contact. Download the Look Up and Live app from the Google Play or App store.
- Complete a risk assessment so as to identify and put in place the appropriate control measures to prevent any hazards (including work practices and procedures) which may have the potential to harm the health or safety of a person. This should be completed for each paddock and piece of machinery to be used
- Install visual markers in any areas where electrical hazards are identified prior to commencing work, as vision can be obstructed due to blind spots in machinery.
- Carefully monitor weather conditions powerlines can sway in winds, sag as temperature increases and are difficult to see at dawn and dusk
- > Ensure operators are aware of the height and reach of their machinery in both stowed and working positions to ensure that minimum approach distance to power-lines are maintained (see Essential Energy's fact sheet 'Work near overhead powerlines' for minimum approach distances)
- Machinery measuring over 4.6 metres has a high risk of contacting overhead powerlines and should be closely monitored to ensure required minimum approach distances are maintained.

Safe work habits

- > Ensure required minimum approach distances are maintained. This is the amount of space required between machinery and anything held by a person and the powerlines in order to prevent electricity arcing to you or the machinery
- Assign a competent safety observer to each work team to guide machinery movements near overhead powerlines, in order to warn the person/operator of unsafe conditions and ensure that minimum safe approach distances are maintained
- > Lower all machinery to the transport position when relocating every time
- When applying netting to vines ensure minimum approach distances between machinery and powerlines are maintained.





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Minimum safe approach distances when working near powerlines

Workers and their equipment should not approach overhead powerlines any closer than the distances specified on the following chart, when machinery is being operated.

Powerlines with voltages up to 132,000 volts	e.g. low voltage and high voltage distribution and subtransmission lines, usually on poles	3m
Between 132,000 and 330,000 volts	e.g. subtransmission and transmission lines on either poles or towers	6m
More than 330,000 volts	e.g. transmission lines usually on towers	8m

What do I need to know about electrical safety inside the winery?

- There is increased possibility of receiving electric shock as a result of using electricity when working in a damp situation
- > Ensure you use electrical equipment and fittings which are intended for use when working in wet or damp
- All electricity supplies at mains voltage are required by NSW law to meet the requirements of the SAA Wiring Rules AS300.
- > Avoid using temporary extension leads where possible.





What else can I do to make my property 'power safe'?

Safety Switches, also known as residual current devices (RCDs) or earth leakage circuit breakers (ELCB) should be installed by qualified personnel on all circuits in the winery and workshop areas





- Electrical equipment and electrical leads should be regularly inspected and tested in accordance with the requirements of Australian Standard AS3760
- Ensure maintenance of machinery and loading/ unloading activities are carried out well away from powerlines
- > Use extra low voltage (max 32 V ac of 115V dc) equipment where possible.
- Contact Essential Energy about marking powerlines and power poles on your property for improved visibility

To warn workers of the presence of overhead powerlines:

Install appropriate signage at least 8 to 10 metres either side of powerlines

> Where possible, provide ground barriers.

SAFETY FIRST

- > You can still be injured without directly contacting an overhead powerline, as electricity can arc across open spaces - so keep your distance!
- > Be aware that the apparent height of powerlines will vary depending on the angle which they are viewed
- Always treat all powerlines as live even though they may appear to be dead