

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

- Talk to the person in control of the property about any work areas which may be hazardous
- Know the location of overhead and underground powerlines, poles and stays on the property and their proximity to your work
- Complete a hazard assessment for each work site including paddocks, sidings, travel routes and pieces of machinery to be used
- Put appropriate control measures in place prior to commencing work; including work practices and procedures to prevent potential harm to persons
- 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
- Ensure operators are aware of the height and reach of their machinery in both stowed and working positions
- Ensure farm workers know the required clearances required between machinery and powerlines
- Ensure all workers are aware of the Electrical Incident Emergency Escape Procedure.

Safe work habits

- Conduct regular tool box meetings and periodically review control measures implemented for effectiveness
- Check for reduced powerline heights resulting from damage, often indicated by uneven powerlines, excessive sag or slack stays. Report any issues observed immediately to Essential Energy on **13 20 80** for rectification
- Monitor weather conditions closely as powerlines can sway in winds, sag as temperatures increase and are difficult to see at dawn and dusk
- Closely monitor any machinery being operated to ensure required powerline clearances are maintained and NO GO ZONES aren't encroached
- 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 toppers and elevators to the transport position when relocating every time; within the paddock, from paddock to paddock and farm to farm
- Tip cane well clear of powerlines. Plan to start work at each new site during daylight hours so that all hazards can be observed
- Stay clear of damaged powerlines and report them immediately to Essential Energy on **13 20 80**.

When burning cane:

- It's the grower's responsibility to ensure that the fire is monitored and controlled during and after to prevent damage to Essential Energy's assets
- Lay cane down directly beneath and for at least 3 metres either side of powerlines prior to commencing burn
- Consider not planting cane directly beneath or within 3 metres either side of powerlines
- Contact Essential Energy a **minimum of 24 hours prior** to commencing burn so staff can attend the site, monitor our assets (e.g. poles and wires) during the burn and isolate supply if necessary
- Ensure Essential Energy is immediately informed if there is any damage.



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

- Ensure maintenance of machinery, building of cane pads and unloading/loading activities are carried out well away from powerlines
- Warn workers of the presence of overhead powerlines prior to commencing work by:
 - Marking either side of powerlines at least 8 to 10 meters with appropriate signage
 - Where appropriate, provide ground barriers.



Be safe, because they need you



Minimum safe approach distances when working near powerlines

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

Minimum approach distances when working near powerlines

- Although these are the minimum clearances required, you can reduce the likelihood of mistakes by operating machinery well clear of powerlines
- Ensure required minimum clearance distance between machinery and powerlines are maintained when transporting machinery to avoid flash overs occurring.



Minimum safe distances for fixed vehicles required when driving under powerlines.

Nominal phase to phase a.c. voltage (volts)	Minimum approach distance (metres)
Low voltage conductors up to 1000 (Usual supply from transformers to houses, sheds and pumps)	0.6
Above LV, up to and including 33,000 (Usual supply to rural transformers on single poles with crossarms)	0.9
Above 33,000 up to and including 132,000 (Usually two poles or single poles without crossarms)	2.1
Above 132,000 up to and including 220,000 (usually steel towers)	2.9
330,000 (steel towers)	3.4
500,000 (big steel towers)	4.4

Electrical Incident Emergency Escape Procedure:

- From a safe distance – at least eight metres – simply get the operator to drive the vehicle clear to break contact (applies to other plant and equipment)
- Stay in plant / equipment / vehicle unless fire occurs, not just smoke
- If they have to get out, get them to jump clear, avoiding coming into contact with plant and ground at the same time. Don't over balance and fall. This is a very risky manoeuvre that should only be used as last resort
- HOP or SHUFFLE with feet together until at least eight metres away
- Seek medical attention after any incident as effects of injury may not show until many hours later.

For more information

Essential Energy's Public Safety team is available to facilitate Electrical Awareness sessions and discuss any questions relating to electrical safety. For more information on electrical safety please call Essential Energy:

General enquiries **13 23 91**

Power outages **13 20 80**

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Essential Energy recommends you familiarise yourself with the latest SafeWork NSW Code of Practice 'Work near overhead powerlines' which can be viewed at: www.safework.nsw.gov.au or you can purchase a copy of the Code of Practice by contacting SafeWork NSW on **13 10 50**.

Safety first:

- Ensure workers have been suitably trained and are competent to perform the work being carried out safely.
- Ensure NO GO ZONE clearances are maintained.
- You can still be injured without directly contacting an overhead powerline, as electricity can arc across open spaces – so keep your distance!
- Carefully monitor weather conditions – powerlines can sway in winds, sag as temperature increases and are difficult to see at dawn and dusk.
- Always treat all powerlines as live even though they may appear to be dead.
- Investigate solutions and remedy current hazardous powerline locations.