ELECTRICAL SAFETY

FOR HIGH LOAD VEHICLE DRIVERS

WORKPLACE FACT SHEET

KNOW THE DANGERS

Drivers of high loads are at risk of hitting overhead power lines and experiencing an electric shock. If you are driving a vehicle with a high load of materials or transporting large plant items, the risk of hitting power lines whilst in transit is real and needs to be managed. You can still be injured without directly contacting an overhead power line, as electricity can arc across open spaces.

HOW TO STAY SAFE WHEN WORKING NEAR OVERHEAD POWER LINES

- Find out the height and voltage of the overhead power lines in your work area by contacting Endeavour Energy on **131 081**.
- Place stickers in the cabin of high load vehicles indicating the height of your machinery in the stowed, operating and transport positions.
- Do not attempt to directly measure the height of overhead power lines as this could cause serious injury or death if the electricity conducts through the tape measure, and ultimately, through you!
- Be aware that power line heights can vary, so a visual inspection for changes in power lines should be carried out before commencing any activity or passing near or under them. Be aware that the apparent height of power lines will vary depending upon the angle from which they are viewed.
- Provide workers with accurate, up-to-date maps and diagrams showing the location of power lines at work sites.
- Design safe traffic paths at work sites well away from power lines for the transit of high load vehicles.
- Assign a competent safety observer to each work team to guide high load vehicles entering, travelling through or leaving the work site to the assigned destination or exit point.
- Before every relocation, lower all machinery to the transport position. Never drive away with the tray up (or in the process of lowering) on a vehicle.
- Ensure that the maintenance and storage of high load vehicles is carried out well away from power lines.
- Provide ground barriers to ensure high load vehicle transits cannot take place near power lines.
- Always treat power lines as live even though they may appear to be dead.

Call 131 081 and put safety first.
www.endeavourenergy.com.au

Endeavour Energy

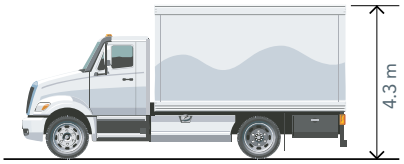
MINIMUM SAFE APPROACH DISTANCES WHEN DRIVING UNDER POWER LINES

An 'approach distance' is the amount of space required to be kept between machinery, or anything held by a person, and power lines in order to prevent electricity arcing to you.

When considering the minimum distance required to safely drive vehicles under power lines remember to include the load, exhaust pipe and attachments such as rotating/flashing lights or radio aerials.

Maximum height: 4.3 metres

Top of the load, cabin, lights, aerial or exhaust – whichever is the highest.



Nominal voltage (volts)	Minimum approach distance (metres)
Low voltage conductors up to 1,000 (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

This table provides minimum safe approach distances for fixed height vehicles. Reference: WorkCover Code of Practice 'Work Near Overhead Power Lines'.

When assessing approach distances for a vehicle driven under overhead power lines, remember:

Machinery measuring over 4.3 metres* is at high risk of contacting overhead power lines and should be closely monitored to ensure required minimum approach distances are maintained.

If approach distances can't be achieved, contact Endeavour Energy on 131 081 for advice.

**In some circumstances, greater than 4.3 metres height distance is allowed. Refer to the RTA's Vehicle Standards Information No. 5 2007 at www.rta.nsw.gov.au*

MINIMUM SAFE APPROACH DISTANCES WHEN WORKING NEAR POWER LINES

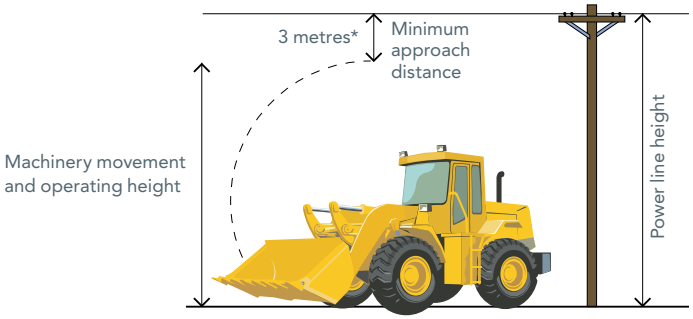
Workers and their equipment should not approach overhead power lines any closer than the following, when machinery is being operated:

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

MACHINERY AT RISK OF CONTACTING OVERHEAD POWER LINES, POLES OR GUYS

Plant and Equipment	Key areas at risk of contact
Tractors	Exhaust, aerial and pulling implements
Implements	Wings fold at transport mode and width
Harvesters	Aerial, exhaust, unloading chute
Tippers	Exhaust, aerial and raising bin
Stock crates	Loading and unloading, walking along top
Cotton module makers	Tramper ram left extended and operating, and dumping activities
Irrigators	Raising or standing pipes vertically, water jet, and travelling underneath
Sprayers	Booms fold at transport mode and width
Excavators/backhoes	Operating, relocating, digging and cleaning dams – arm, knuckle bucket
Dozers	Pushing and stacking timber Raising roadways reduces clearances
Augers/grain equipment	Storage bin position and moving augers
Cranes	High boom, swaying rope and loads

The distance that must be assessed prior to work



*Voltages up to 132,000 volts.

Endeavour Energy recommends you familiarise yourself with *Work Near Overhead Power Lines Code of Practice 2006*, WorkCover NSW which can be viewed at www.workcover.nsw.gov.au or you can purchase a copy of the Code of Practice by contacting WorkCover on 131 050.

SAFETY EXCELLENCE

IN EMERGENCIES CALL 131 003

24 hours a day, 7 days a week

If you have any questions about what you should do to stay safe please call 131 081 or visit us at www.endeavourenergy.com.au

0611-ENE2352_HL