



Transporting machinery around powerlines

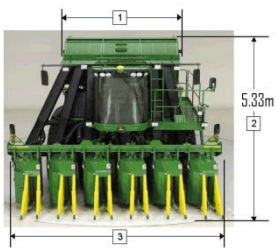
Overhead powerlines criss-cross the country. Often unnoticed, they are essential to provide electricity to our communities. Anyone engaging in relocating high loads risks serious injury or death as a result of contact with powerlines or electrical flash overs occurring.



This fact sheet will assist people involved in high load transportation operations to reduce their risk working near powerlines. Risk is higher for those who tow or transport equipment in the vicinity of powerlines.

If the height of the vehicle or load is more than 4.3 metres but less than 4.6 metres and the travel path is not a designated high vehicle route, you should contact your local electricity network provider to verify overhead powerline heights. Further regulations apply to vehicles where loads are higher than 4.6 metres. Visit rms.nsw.gov.au for more information.

Carrier responsibilities and requirements



Under New South Wales' Roads and Maritime Services (RMS) regulations and guidelines, the carrier must be clearly aware of the load height and the associated restrictions that apply, including the obligation to contact Essential Energy if the load exceeds 4.6 metres in height.

Carrier communications with Essential Energy

> Where the load height exceeds 4.6 metres and is less than five (5) metres in height and the proposed route is not a designated 4.6 metre high vehicle route the carrier should contact Essential Energy to verify overhead powerline heights.

> Where the load height exceeds five (5) metres, the carrier must contact Essential Energy and seek permission for the proposed transport.

When contacting Essential Energy

The carrier must:

- > NOTIFY Essential Energy no less than twelve (12) working days prior to proposed transport date
- > PROVIDE written information regarding dates, times, routes, load type and load dimension / height to Essential Energy
- > RECEIVE written approval from Essential Energy prior to any transport of the high load on the designated routes within Essential Energy's area.

High load permit request procedure

Initial contact should be to contact Essential Energy's high load coordinator by phoning **13 23 91**.

You can apply for a high load permit online at: essentialenergy.com.au/partners/high-load-permit

Know the height of your machinery or load

- > Understanding how high your machinery or load will be when it's being transported could prevent an incident
- > Ensure the machinery is fully lowered before transporting the load
- > Don't leave rails erected and always ensure materials are secured.

WARNING

- > DO NOT attempt to directly measure the height of overhead powerlines
- > DO NOT use conductive metallic objects or measuring devices such as metal tape measures for estimating the height of overhead powerlines.

Typical high load operations include:

- > Machinery walked/driven between properties
- > Houses being relocated
- > Transportation of large machinery.



When transporting high loads the driver must ensure:

- > Directives from Essential Energy personnel are followed at all times
- > At no time may a person climb or ride on the load
- > Other persons remain at least eight (8) metres clear of the load whilst the load passes beneath live conductors
- > The vehicle does not remain stationary within three (3) metres of live conductors.

When transporting high loads, plan safe travel paths that allow you to maintain the required clearances. Before entering the destination, worksite or property, contact the site manager or property owner for information on the approved safe travel path on site. Visually check all powerlines if you must pass beneath them and ensure you don't vary from the approved safe travel path.

Transit envelope



Transit envelope and minimum clearances

The transit envelope is the maximum overall height of the vehicle, the area encompassing normal height and width of vehicles or plant when travelling to or from a work site.

Load to Line Minimum Clearances	
Insulated Low Voltage up to 1,000 volts (only with consultation and insulation verified by an authorised person)	0.3 metres
Uninsulated Low Voltage up to 1,000 volts	0.6 metres
High Voltage, up to and including:	
33,000 volts	0.9 metre
132,000 volts	2.1 metres

Refer to: Essential Energy's fact sheet "Work near overhead powerlines."

Situational awareness and changing conditions

- > Essential Energy always attempts to ensure information is correct at the time of issuing. Visual inspections are

conducted and the height of powerlines are measured before permits are issued

- > Be aware that since the permit was issued, parts of Essential Energy's electrical infrastructure may have changed due to storms, hot weather, bird strikes or other factors
- > Changes to any of this infrastructure could reduce the clearances required for you to safely pass under the powerline
- > Any changes observed should be reported immediately to Essential Energy on **13 20 80**.

Situational awareness and changing conditions

1. Try not to panic, remain calm and stay in the vehicle until the power has been isolated and the powerlines removed, don't risk being electrocuted by attempting to leave the vehicle
2. Advise anyone near the incident site to stay a minimum of eight (8) metres from the vehicle and anything else in contact with the powerlines
3. Contact Essential Energy immediately on **13 20 80** to switch off the power and call emergency services (**000**) to report wires down and a life-threatening situation
4. Always treat powerlines and anything in contact with the powerlines as live
5. Only attempt to drive the vehicle if you're not going to create another hazard to yourself or others and ensure you drive a minimum of eight (8) metres from the powerlines and anything in contact with the damaged powerlines.
6. Rubber tyres may explode up to 24 hours after a contact. Tyres should then be replaced if there is any evidence of arcing or burning on them.

For more information on the emergency evacuation procedure, please refer to Essential Energy's fact sheet 'Emergency response to a powerline incident'.

SAFETY FIRST

- > Know the height of the machine or load
- > Visually check powerlines before passing under them
- > Ensure a high load permit has been obtained
- > Don't change your identified route.