

MOBILE PLANT AND POWER LINES

THE REQUIREMENTS WHEN OPERATING
PLANT IN THE VICINITY OF TRANSPOWER
NEW ZEALAND POWER LINES.

Keeping the energy flowing



TRANSPOWER



ABOUT TRANSPOWER

Transpower is the state-owned enterprise that owns and operates the National Grid – or high voltage transmission network – that carries electricity around New Zealand. Transpower's network is made up of 12,000km of high voltage transmission lines and more than 170 substations and switchyards.

This brochure provides important information to ensure the safe use of machinery, mobile plant and vehicles near overhead power lines. It is important to maintain safe distances from transmission lines to ensure:

- The safety of operators of mobile plant working near transmission lines.
- The safety of the public in the vicinity of the working area.
- The reliability of the electricity supply.

REMEMBER TO:

LOOK UP

Before you Dig, Cross or Lift.



Rules and Regulations

Electrical Safe Distances are set out in New Zealand Electrical Code of Practice 34 (NZECP 34:2001).

Some key aspects of NZECP34 that relate to the operation of mobile plant near Transpower's lines are set out below.

1. The distance between any live overhead electric line and any part of any mobile plant or load carried shall be **"AT LEAST 4.0 METRES"** unless the operator has received written consent from Transpower allowing a reduced distance. (Clearance to loads in transit on public roads are governed by the Traffic Regulations 1976.)
2. Written consent is required from Transpower to excavate near towers, poles and stay-wires closer than the distances as set out in figures 1 and 2 of Section 2 of NZECP34.
3. No work shall be carried out above Transpower transmission lines without written consent. Helicopter operations are governed by the Civil Aviation Rules.
4. A warning notice is to be fixed in a conspicuous place in the operator's working position. The notice should say:

"WARNING KEEP CLEAR OF POWER LINES"

Approval of reduced safe distances

Transpower may consent to reducing the following distances, in some circumstances.

1. Distance to live conductors

Any reduction of the Minimum Approach Distance will require an engineering assessment prior to the work, and if permitted, must be carried out by an electrically competent person. The extent of reduction is dependant on the line voltage and configuration.

2. Excavation distances

Any reduction of the excavation distances as set out in NZECP34 will require an engineering assessment prior to the works being carried out.

Notes:

The cost of any engineering assessment will be borne by the requester. Please refer to Transpower's separate brochure 'Corridor Management Policy' for guidance on building within or near transmission corridors.



Minimum safe distances for the operation of mobile plant near Transpower conductors (wires)

ALL WORKS

The distance between any live overhead electric line and any mobile plant or load carried shall be **at least 4m**, unless the operator has written consent from Transpower

Section 5.2.1

WORKING ABOVE OVERHEAD LINES

Written consent from Transpower for the operation of mobile plant or any load carried above the overhead electric line
Section 5.3.1

HEDGE CUTTERS

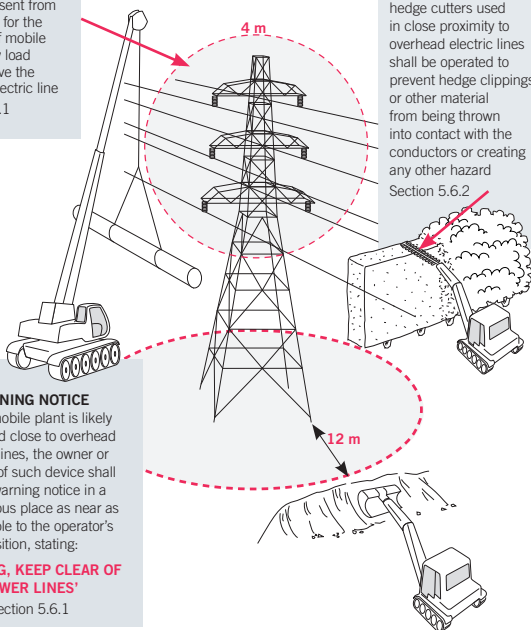
Mechanically-operated hedge cutters used in close proximity to overhead electric lines shall be operated to prevent hedge clippings or other material from being thrown into contact with the conductors or creating any other hazard
Section 5.6.2

WARNING NOTICE

Where mobile plant is likely to be used close to overhead electric lines, the owner or operator of such device shall affix a warning notice in a conspicuous place as near as practicable to the operator's position, stating:

'WARNING, KEEP CLEAR OF POWER LINES'

Section 5.6.1



Notes

- This diagram is for quick reference only. Please refer to Sections 2 & 5 of NZECP:34 2001 for complete minimum safe distance requirements.
- Mobile plant includes cranes, loaders, excavators, drilling or pile driving equipment, or other similar device.
- The provisions of Section 5 do not apply to live line work, or to any conductor forming part of the mobile plant or any collector wire, insulated cable, or flexible cord used for the purpose of supplying electricity to the mobile plant (section 5.1.1) or while mobile plant is in transit on a road and the relevant requirements of the Traffic Regulations 1976 are observed (section 5.1.4).

Call us toll free on

0508 526 369

For advice on working near Transpower's transmission lines.

Contact us

Transpower New Zealand Limited
Transpower House, 96 The Terrace
PO Box 1021, Wellington 6140
www.transpower.co.nz

TRANSPOWER