

How much needs to be cut from a tree?

Transpower's utility arborists will consider the tree's size, shape and growth rate prior to pruning, however their main priority is maintaining the minimum safe distances between the transmission line and the tree(s).

Our utility arborists will attempt to prune branches to redirect future growth away from power lines so that the natural shape and the health of a tree can be preserved. However, if a tree requires such a degree of trimming that it would become unavoidably disfigured or presents a safety risk, it may be more appropriate to remove the tree and replant with a more suitable specimen.

Other situations where trees may need to be completely removed include, where trees are diseased or are on unstable ground, and at a distance from the line which would cause damage to the line if they fell.

What should I consider when planting near power lines?

Trees and shrubs are an important living part of our environment and community. Transpower recognises that in some cases it is desirable to plant trees close to lines for a number of practical reasons however, it is very important to think beforehand about the mature height and spread of the tree to ensure enough space is available for it to grow without impacting the lines. By considering these matters in advance, future conflicts between trees and power lines can be avoided.

FALL HAZARD ZONE (FHZ)

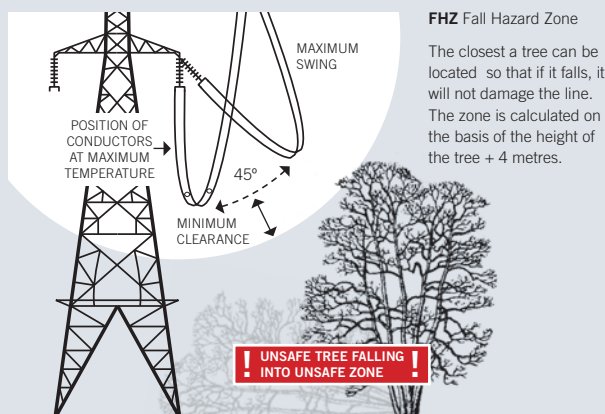


Fig 2

If you plan to plant near power lines, consider low-growing species/cultivars (up to 4m maximum height) of the following trees and shrubs:

Examples of natives:

Clianthus puniceus, Coprosma, Corokia, Dodonaea, Flax, Fuchsia, Hebes, Hoheria, Leptospermum, Lophomyrtus, Macropiper exelsum, Oleria, Pittosporum, Psuedopanax, Sophora

Examples of exotics:

Apple Blossom, Crab Apple, Dogwood, Maples, Prunus, Rowan, Viburnum, Wattles

Planting directly under lines should not exceed 2m in height.

If establishing commercial forestry near lines, Transpower can help calculate practical planting distances from the line. Early planning will avoid trees having to be trimmed or removed prior to maturity later on.

Where trees have been removed, you can stop regrowth or sprouting by applying environmentally-friendly herbicides to the stumps. It may then be possible to plant other 'power line-friendly' shrubs in their place.

We recommend you contact your local nursery for advice.

In all cases, it is very important to check the mature growth height of trees and shrubs before planting.

Transpower has more 'Frequently asked questions' relating to tree and vegetation trimming and power lines available at www.transpower.co.nz

REMEMBER:

Transmission lines are carrying electricity at very high voltages. Getting too close to transmission lines and towers, or holding something close to a live conductor (wire), is **EXTREMELY DANGEROUS**.

Call us toll free on

0508 526 369

For advice on working near Transpower's transmission lines.

Contact us

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TREES AND POWER LINES

THE RESPONSIBILITIES OF TREE OWNERS AND TRANSPOWER NEW ZEALAND LIMITED

Keeping the energy flowing



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TRANSPOWER

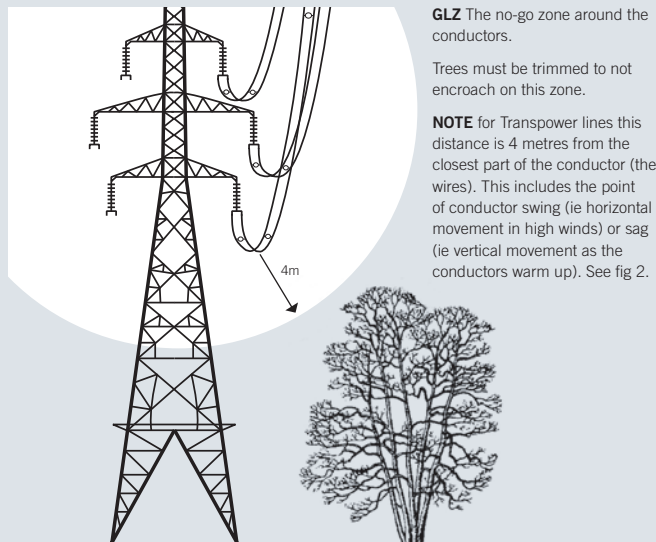
About Transpower and this brochure

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

This brochure provides important information to landowners on managing vegetation (particularly trees) near overhead power lines. Vegetation management is needed around Transpower's overhead transmission lines because of the potential for vegetation to threaten:

- the reliability of the electricity supply (for example, through trees touching or falling on lines)
- public safety through the presence of hazardous voltages around trees that contact transmission lines.

GROWTH LIMIT ZONES (GLZ)



GLZ The no-go zone around the conductors.

Trees must be trimmed to not encroach on this zone.

NOTE for Transpower lines this distance is 4 metres from the closest part of the conductor (the wires). This includes the point of conductor swing (ie horizontal movement in high winds) or sag (ie vertical movement as the conductors warm up). See fig 2.

Fig 1

Why prune or remove trees?

Trees growing too close to power lines may cause:

- a fault which will affect the operation of the line;
- injury or death to someone near the tree; or
- damage to land and property.

If trees touch high voltage conductors (or wires), or electricity “jumps” the gap to a tree, then dangerous voltages may arise in the area around the tree, or on the tree itself. These voltages have the potential to cause serious injury or death. High voltage electricity flowing into trees can also cause trees to ignite. The effect of a tree fire can be very severe in forest areas, as well as threatening human and animal life.

Transpower is legally required to maintain its lines to minimise any tree-related interruptions to the supply of electricity.

What is Transpower's legal authority for tree maintenance?

The Electricity (Hazards from Trees) Regulations 2003 came into effect on 1 July 2005. Copies of these Regulations are available from www.transpower.co.nz.

The Regulations:

- define safe separation distance between trees and overhead lines;
- specify who is responsible for ensuring separation distances are maintained;
- place potential liability on tree owners if the Regulations are breached; and
- provide an arbitration system to resolve disputes relating to tree trimming.

Compliance with these Regulations is mandatory.

How often does Transpower inspect lines?

Transpower's contractors carry out routine inspections of the lines every six months. These inspections include checking if trees are growing too close to lines and may cause a line fault.

Transpower's priority in tree trimming is public safety. If you have concerns that a tree is growing too close to a Transpower high voltage overhead line, please contact us toll free on 0508 526 369.

Can I prune the trees myself?

No. You should not attempt to prune any vegetation growing near any overhead high voltage power line. Only specially-trained line clearing professionals should work around power lines.

There is significant risk to persons carrying out such an activity because of the risk of electrocution through getting too close to a live conductor.

If trees owned by you come into contact with, and cause damage to the electricity network, including contact during the act of tree trimming, you may be liable for that damage including any damage caused to third parties.

Please contact us toll free 0508 526 369 to arrange for a tree contractor to come and prune your tree.



Who pays for the trees to be cut or trimmed?

Transpower is responsible for the maintenance and operation of its transmission lines.

Transpower will pay the costs associated with the first cut of a tree under the Tree Regulations. After the first cut of a tree, the cost of maintaining the tree passes to the owner of the tree. As the tree owner, if you do not want to take the responsibility for the tree, you can send us a written “no-interest tree notice” which means that we will take responsibility for the tree, including removing or trimming the tree if we decide this is the best course of action.

No-Interest Tree Notice

Transpower has a standard “no-interest tree notice” form and freepost envelope that can be sent to landowners to fill out and return. If you would like to be sent a copy, please call us toll free on 0508 526 369.

If you accept tree ownership then you are responsible for meeting the ongoing vegetation management costs to comply with the Tree Regulations (other than the first cut which by law Transpower must pay). However, for safety reasons we would still prefer to arrange for qualified people to undertake the trimming. In these situations, Transpower may seek to recover from you all reasonable costs incurred in managing the threat posed by the vegetation.