

# Keeping safe around transmission assets

## Construction

INFORMATION SHEET | MAY 2026



Transpower's network of transmission towers, substations, fibre optic telecommunications cables and 12,000 km of high-voltage lines run the length of the country. Many of these assets are on private land, some are underground, and our lines span many rural properties. We want to help keep everyone safe when living and working around our assets.

### How incidents and damage can occur

#### Work around transmission assets

- People unaware of asset locations, especially underground, can accidentally dig or drive machinery into them.
- Machinery, irrigators, aircraft, trucks or long loads get too close to (or even touch) lines especially when working in tight spaces.
- Unauthorised work, such as building structures, fences, or other installations too close to poles, towers, or lines, can damage foundations or the land around assets.
- Distraction, unfamiliar surroundings, or reduced situational awareness can increase the risk of contact with lines or damage to assets.

#### Environmental and natural hazards

- Vegetation growing into lines, fires, or smoke can damage towers and insulators, or cause lines to arc.
- Lines sag with temperature or wind changes, and changes to terrain or new fill can reduce clearance, increasing risk underneath.
- Extreme heat, storms, or other natural hazards can compromise towers and lines, creating hazards for people and machinery.
- Fires, heat damage, or vegetation near assets can trigger unplanned outages or create dangerous conditions around transmission equipment.

**Electricity can arc (jump) through the air without direct contact with anything physical. That's why it is critical to know where our assets are, and to maintain safe practices when working around them.**

### In the event of an emergency call 111 then 0800 THE GRID

- We can de-energise the line and make it safe
- We can give advice on what to do next.

#### If a transmission line or cable is struck:

##### Stay put

- If your machine contacts an overhead transmission line or underground transmission cable or you see a flash, do not move or exit your machine unless there is an immediate danger such as fire.
- Turn off all machinery and call 111 then Transpower on 0800 THE GRID.
- Warn others – do not let anyone approach or touch the transmission line, cable or fibre.

##### If you must evacuate your machine

- Jump clear — keep both feet together and don't touch the machine and ground at the same time as this creates a path for electricity to flow through your body.
- Shuffle or hop away, small steps reduce the chance of shock.

##### Don't touch!

- Never touch downed or damaged transmission lines – always treat them as live.
- Electricity can travel through the ground and metal, even if a line appears to be broken or 'dead'.

*If a telecommunications cable is struck please call Transpower's Network Operations team first on 0800 TPOWER, selecting Option 2*

## Stay safe around our assets

### Plan ahead

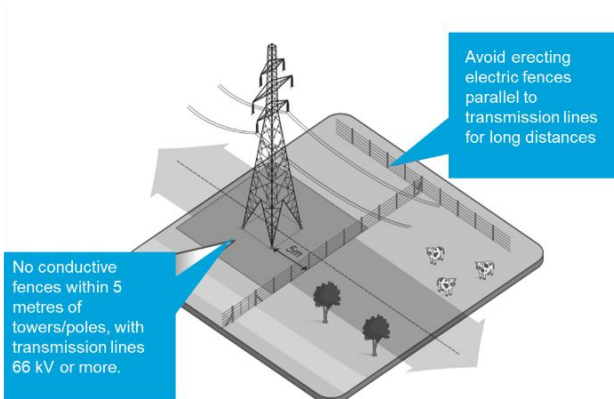
- Identify all the assets within your work area – above and below ground.
- Discuss any plan to alter the ground level under a transmission line/ communications cable with Transpower, to ensure that clearances are not compromised.
- Always plan layout early and check before construction. Written consent may be required before working around Transpower assets.
- Use beforeUdig.co.nz – a valuable source of information and asset location maps.

### Permanent structures must be built well clear of assets

This applies to pump houses, sheds, stock shelters, permanent fences, or other permanent buildings.

- 12m from any tower.
- 8m from any pole.

Temporary conductive fences should be at least 5m from assets



### **\*IMPORTANT**

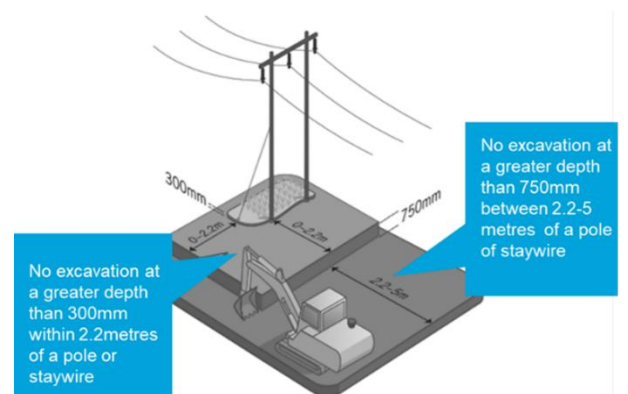
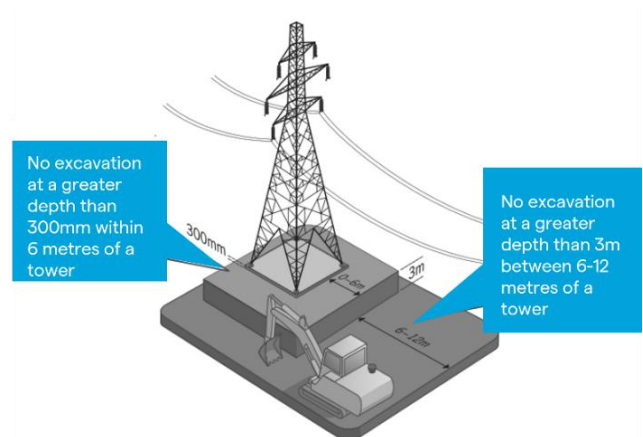
If work is needed within these distances, you **must** contact Transpower for approval **before starting**.

### Look up, beneath and around

- Make sure all equipment, high or long loads and people on vehicles are kept well clear of transmission lines.
- Install physical stops or markers to prevent encroachment into unsafe areas.
- Inspect equipment regularly to ensure boom heights are within safe operating limits.
- Consider using a spotter to increase visibility when working around transmission assets.

### Maintain safe distances

- Make sure all equipment, high loads or people on vehicles are kept well clear of overhead transmission lines.
- Keep booms, irrigators, augers, and tip trucks lowered when moving within 6m of transmission lines.
- Keep all plant more than 4m away from transmission lines.
- Consider other methods or machinery that will not reach the transmission lines.
- Use remote-controlled, truck-mounted cranes (Hiabs) to give operators a better view from a safe distance.
- Install physical stops or markers to prevent encroachment into unsafe areas.
- Inspect equipment regularly to ensure boom heights and pivots are within safe operating limits.



### We are here to help

Contact us on **0800 LANDOWNER** for advice and use [beforeyoudig.co.nz](http://beforeyoudig.co.nz) to locate underground assets.