ElectraNet

VEGETATION MANAGEMENT

ElectraNet undertakes periodic vegetation management works to ensure that mandatory minimum clearance between vegetation and powerlines is maintained.

Transmission lines within a designated bushfire or high bushfire rated area are inspected and cleared every year, while lines in all other areas are inspected and cleared every three years.

The clearance distances between powerlines and vegetation are legal requirements outlined in the Electricity (Principles of Vegetation Clearance) Regulations 2010.

Vegetation clearance distances are influenced by:

The powerline's location and whether or not it is located in a defined bushfire risk area.

The powerline's voltage.

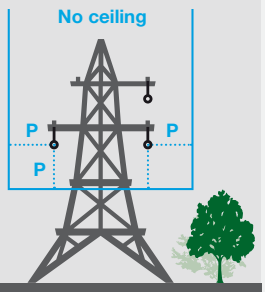
Whether or not the conductor is **insulated or uninsulated**.

The span, or distance, between poles or transmission towers (powerlines with greater span length can swing and sag further under windy and hot conditions and require greater clearance distances).

The location of vegetation in relation to the closest tower (powerline movements are greater midway between towers and a greater clearance zone is required).

Vegetation clearance distances

At the structure

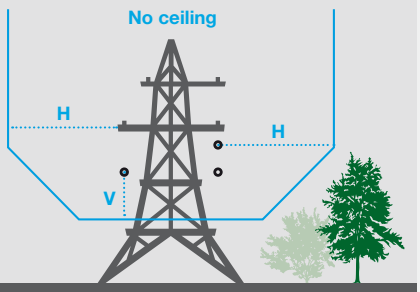


132 kV '**P**' = 2.5 metres
275 kV '**P**' = 4.5 metres

Clearance at structures is a constant for both 132 kV and 275 kV for all types of towers.

The clearance zone has no ceiling.

At mid span



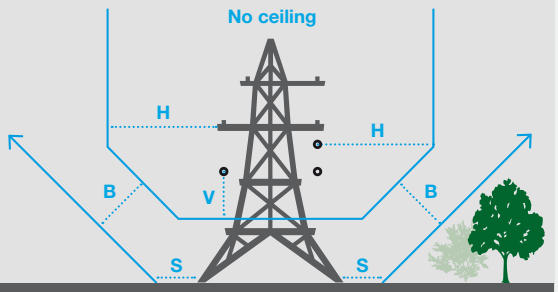
V = Vertical clearance, measured from the bottom of the conductor at mid span at 15˚C
H = Horizontal clearance at mid span

Clearances have increased in size to account for the sag and swing of the conductor.

A 45˚ element has also been included.

V and H are variable and depend on length of the span between towers.

Buffer zone at mid span

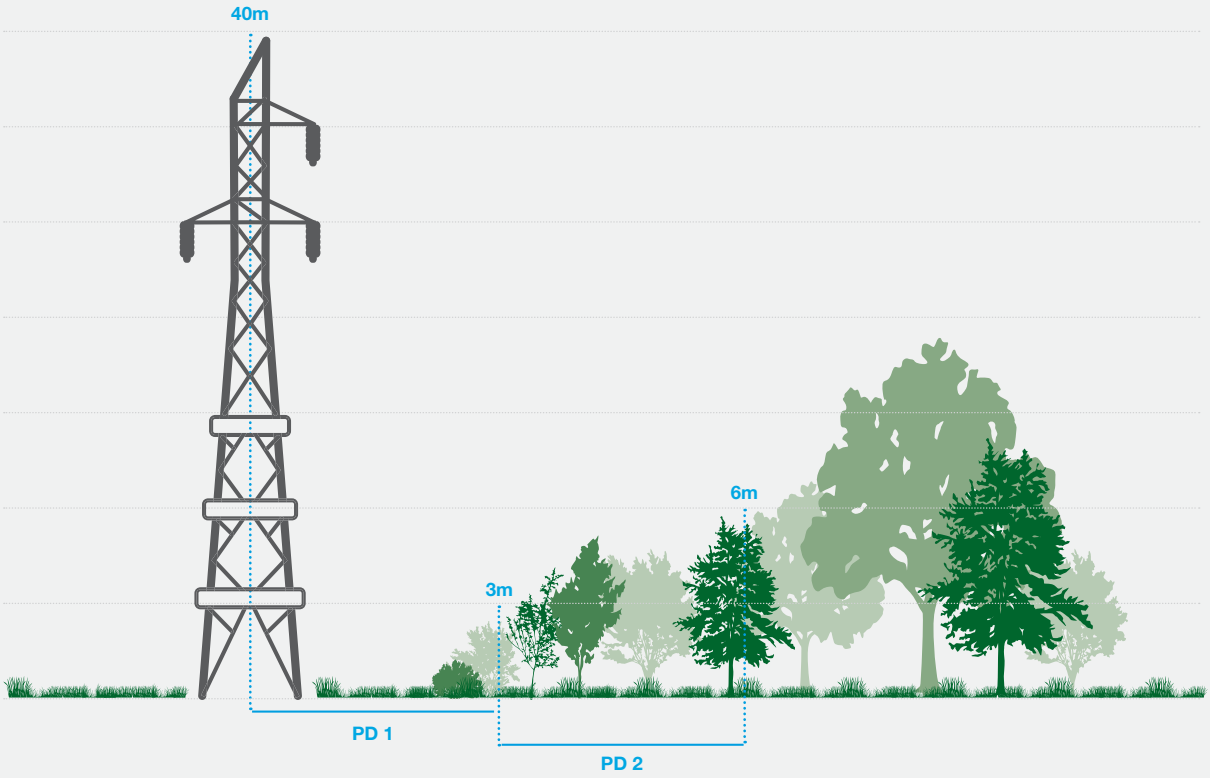


132 kV '**B**' = 3 metres
275 kV '**B**' = 3 metres

A buffer zone is an extension of the vegetation clearance zone, to allow for natural growth while still allowing the clearance zone to remain clear until the next trimming is due.

S is a variable factor which increases with the length of the span between towers.

Planting new vegetation around transmission lines



Prescribed Planting Distance Restrictions

Voltage	Structure	Prescribed planting distance from centreline	
275 kV	Tower	**PD1** 0 - 12.5 metres	**PD2** 12.5 - 25 metres
132 kV	Tower	**PD1** 0 - 15 metres	**PD2** 15 - 30 metres
132 kV	Stobie Pole	**PD1** 0 - 10 metres	**PD2** 10 - 20 metres
66 kV	Stobie Pole	**PD1** 0 - 6.5 metres	**PD2** 6.5 - 13 metres
Maximum height of vegetation		**PD1** Max. 3 metres	**PD2** Max. 6 metres

The type and location of trees that can be planted near powerlines is also limited by legislation, to proactively minimise the impact of trees growing into the clearance zone and the need to trim them.

Further information about vegetation clearance zones and the prescribed species, height restrictions and distance for planting new trees near powerlines is available from the Office of the Technical Regulator.

Transmission easement landholders with questions about vegetation management can also contact ElectraNet at any time on **1800 413 331** or at **landholderenquiry@electranet.com.au**

Vegetation needs to be cleared from around transmission lines to avoid power outages, damage to the lines, or the risk of fire start.