

Planting near overhead power lines

Voltage Information

Type of voltage	Voltage	Where found
Low voltage (LV)	240v-415v	The supply to houses, on wooden poles, predominately urban, conductors with vertical formation or bundled together
High voltage (HV)	11,000v-20,000v	Our distribution voltage mainly on wooden poles, conductors with horizontal formation, predominately rural
Extra High Voltage (EHV)	33,000v	Mainly horizontal formation on wooden poles
	66,000v	On wooden poles and steel towers (pylons)
	132,000v	Mainly on steel towers (pylons)

CE Electric UK's top tips for responsible planting

- Look up before you plant
- Consider how big the tree or shrub you are planning to plant will grow both upwards and outwards
- Remember that climate change means that trees and shrubs are now growing far faster and taller than ever before
- Follow the advised planting distances as recommended within this leaflet
- Never prune or climb a tree near a power line
- If in doubt about growing heights and spread, consult our vegetation management specialists

Contact us

North East of England and North Yorkshire

For general enquiries call:

0845 070 7172, and select option 3

To report loss of electricity supply call:

0800 66 88 77

If you are hard of hearing and have a text phone, call:

0800 169 1136

West, East, South Yorkshire and northern Lincolnshire

For general enquiries call:

0845 602 4453, and select option 3

To report loss of electricity supply call:

0800 375 675

If you are hard of hearing and have a text phone, call:

0800 028 9507

This leaflet can be supplied in Braille, large type, audio and other languages.

Please call 0800 652 6543

Further information on vegetation management

and this leaflet can be found on our website

www.ce-electricuk.com



Planting near overhead power lines

Important advice from CE Electric UK, your regional electricity distributor

Maintaining vegetation and controlling tree growth

As the electricity distribution operator for the North East of England, Yorkshire and northern Lincolnshire, CE Electric UK is responsible for maintaining a safe and secure electricity network. We achieve this through our subsidiary companies, Northern Electric Distribution Limited (NEDL) and Yorkshire Electricity Distribution plc (YEDL), supported by specialist contractors.

One of the most important and high-profile maintenance activities we undertake is our vegetation management programme, keeping our network of overhead power lines clear from trees and other vegetation which could potentially cause disruption to the electricity supply or compromise safety.

This essential work ensures that:

- Trees and other vegetation do not come into contact with overhead power lines during bad weather
- People cannot accidentally come into contact when climbing or working on trees
- A safe and secure supply of electricity is maintained at all times

Help us help you

We invest many millions of pounds annually on our vegetation management programme, a sum that could be drastically reduced if more people were aware of the potential hazards of planting the wrong trees in the wrong places!

Preventing the number of vegetation-related power outages not only saves us time and money; it also benefits customers, as the electricity supply will be more secure. CE Electric UK can invest money saved on proactive issues, such as upgrading our network.



Look up before you plant

We strongly recommend that you do not plant anything underneath any of our electrical equipment.

We also encourage everyone to take extra care before planting anything anywhere near overhead wires.

Different species grow at different rates depending on the climate and ground conditions where they are situated.

Suitable trees/shrubs to plant near overhead electrical wires

The advised planting distances below are applicable to the vegetation listed in Table 1 below.

Type of overhead electricity lines	Planting distances
Low voltage	5m either side of conductors
High voltage	12m either side of conductors
Extra high voltage	20m either side of conductors
Applicable to all voltages	CE Electric UK strongly recommend you plant nothing underneath conductors

These are examples of common trees and shrubs which are generally suitable for planting close to overhead electricity lines (whilst pruning or other management may be required in some circumstances, these plants can usually be maintained below line height).

Table 1: Suitable Trees

Type of vegetation	Species
Native trees & shrubs	Blackthorn, Broom, Buckthorns, Crab Apple, Dogwood, Elder, Gorse, Guelder Rose, Hawthorn, Hazel, Holly, Privet, Rowan, Spindle, Wayfaring Tree, Wild Service Tree
Ornamental broadleaves	Bay, Eleagnus, Judas tree, Laburnum, Magnolia, many fruit trees on dwarf or low vigour root stocks, many ornamental shrubs including some ornamental Rhododendrons and Azaleas, Medlar, Ornamental Malus species, Pittasporum, small ornamental Maples, smaller ornamental Sorbus varieties, Strawberry tree, thorns
Conifers	Dwarf conifer varieties (eg Junipers), Yew, Christmas tree crops (but only where a maximum of 3-4m height attainment can be maintained, i.e. involving a usual rotation length of 5-8 years)

Unsuitable for planting under overhead electricity lines



Table 2, below, gives examples of common trees and shrubs that are generally UNSUITABLE for retention or planting under or close to electricity lines. This is because of their speed of growth, the height they can grow to and/or the way they react to pruning.

Table 2: Unsuitable Trees

Type of vegetation	Species
Native trees & shrubs	Alders, Ash, Birches, Elm, Field Maple**, Hornbeam, Limes, Oaks**, Poplars, Wild Cherry, Willows
Ornamental broadleaves	Acacias, American Oaks, Beech, Catalpa, Eucalyptus, Evergreen Oak, False Acacia, Horse Chestnut, Laurel, Italian Alder, most Maples (except low growing ornamentals), Planes, Poplars, Southern Beech, Sycamore, taller growing fruit trees and most ornamental Pear and Cherry species, Turkey Oak, Turkish Hazel, Walnut
Conifers	All plantation conifer and hedging species (Spruces, Larches, Pines, Firs, True & False Cypresses (including Leylandii) and Western Red Cedar), Cedars, Dawn Redwood, Maidenhair tree, Monkey Puzzle, Redwood, Wellingtonia

** Note that Oaks and Field Maple should not be planted under overhead power lines, but where native Sessile or English Oaks or Field Maple already occur under overhead electricity lines they may often be maintained by crown height reduction techniques.