

Agricultural netting around powerlines



Safety is the overriding consideration of Essential Energy when granting approval for the installation of agricultural netting near powerlines.

Essential Energy may allow agricultural netting to be erected provided safety and access requirements are met. Landowners must meet certain criteria before we can grant approval to erect agricultural netting that impacts on the Safe to Approach distances to our electricity network.

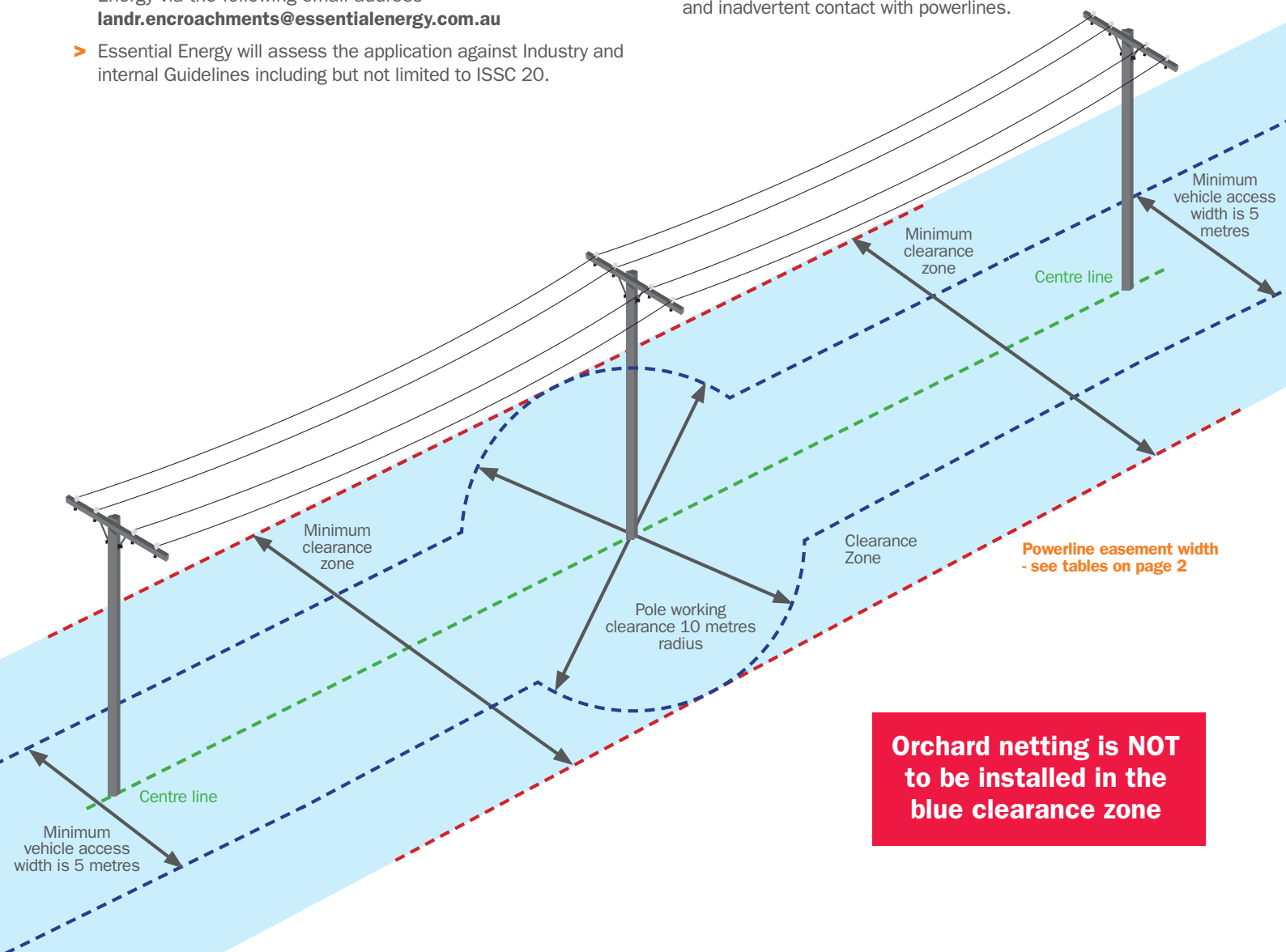
What you must do as the landowner to allow netting to be installed

The landowner must obtain written approval from Essential Energy prior to installing any netting near our electricity network.

- > The landowner must contact Essential Energy for a review of the proposal to be approved
- > The landowner must provide relevant information including plans with measurements to conductors and structures (including poles, stays etc.), catenary type and earthing details. Essential Energy may ask for additional information should it be required to finalise a review
- > The landowner is to submit their application to Essential Energy via the following email address - landr.encroachments@essentialenergy.com.au
- > Essential Energy will assess the application against Industry and internal Guidelines including but not limited to ISSC 20.

What you must do with existing netting and infrastructure

- > Provide continuous, unobstructed access along the full length of the powerline to allow Essential Energy access to powerlines, poles, transformers and other equipment
- > Provide a 5.0 metre wide access track to Essential Energy's electrical infrastructure
- > Provide a minimum height of 4.6 metres for the safe passage of vehicles and heavy plant
- > Provide an unobstructed working space around the power pole for a radius of 10 metres
- > Provide an unobstructed and continuous width, as per table on page 2, directly under any powerline
- > Provide access between boundary fences of a minimum of 5.0 metres
- > Provide entry via clearly marked access roads under the netting or by a permanent gap in the netting
- > Where earthing is required contact Essential Energy on **13 23 91** for more information about earthing design
- > Cateneries must be secured to prevent uplift and inadvertent contact with powerlines.



Orchard netting is NOT to be installed in the blue clearance zone - see tables on page 2

What you shouldn't do?

- Support catenaries from power poles or stay wires
- Support netting from power poles or stay wires
- Place any netting or catenary within 10 metres of a power pole
- Place any netting or catenary within the easement width of a powerline (as per tables below)
- Restrict access to Essential Energy's electrical infrastructure
- Place netting or support structures within a registered easement
- Allow the netting structure to be accessible by any person
- Attempt to directly measure the height of overhead powerlines, it may cause serious injury or be potentially fatal. Measurements must only be made by Essential Energy.

What are the minimum safe approach distances when working near powerlines

- Workers and their equipment must not approach overhead powerlines any closer than **three (3) metres**, when machinery is being operated, unless approved training and precautions are adhered to in accordance with the SafeWork NSW Code of Practice for Work Near Overhead Powerlines
- It is essential that you know the height of your machinery in both the operating and transport positions
- Be aware that height of powerlines can vary with temperature and wind conditions; therefore, a visual inspection for changes in powerlines should be carried out before commencing any activity or passing near or under them
- Maintain safe working clearances during construction and adhere to the requirements of the SafeWork NSW Code of Practice for Work Near Overhead Powerlines which can be viewed at safework.nsw.gov.au or you can purchase a copy by calling Safework NSW on **13 10 50**.

Powerlines with voltages up to 132,000 volts	e.g. low voltage and high voltage distribution and subtransmission lines usually on poles	3m
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General information: Essential Energy requires agricultural netting (including stays) to be no closer than the standard easement width for overhead and underground powerlines UNLESS written approval is provided by Essential Energy.

SAFETY FIRST

- Contact Essential Energy on **13 23 91** at the planning stage of any construction or removal activity for safety advice
- You can still be injured without directly contacting an overhead powerline, as electricity can arc across open spaces - so keep your distance
- Never approach a fallen powerline, they can remain alive, even when laying across the ground
- If you are unsure of the height and voltage of power lines contact Essential Energy for more information.

The two images shown here depict examples of unsafe work practices



Overhead easement voltages widths

Construction Voltage	Width in Metres
132kV 'H' pole type Single pole	45 40
66kV 'H' pole type Single pole	30 30
33kV (Inc.19.1kV SWER) 'H' pole type Single pole	30 25
22kV (Inc.12.7kV SWER) Bare wire CCT ABC	20 20 15
11kV Bare wire CCT ABC	20 20 15
Low voltage Bare wire ABC	15 10

Underground easement widths

Construction Voltage	Width in Metres
132kV	6
66kV	6
33kV (Subtransmission)	6
33kV (Distribution)	2
22kV	2
11kV	2
Low voltage	1

Low voltage service widths

Construction Voltage	Width in Metres
Overhead Insulated Long Span Short Span	10 5
Underground	1



Essential Energy's Public Safety and Land and Routes Teams are available to facilitate Electrical Hazard Awareness sessions, discuss any questions relating to electrical safety or encroaching on Essential Energy's infrastructure. For more information on electrical safety or encroachments please call Essential Energy on 13 23 91.