

Electrical safety around powerlines

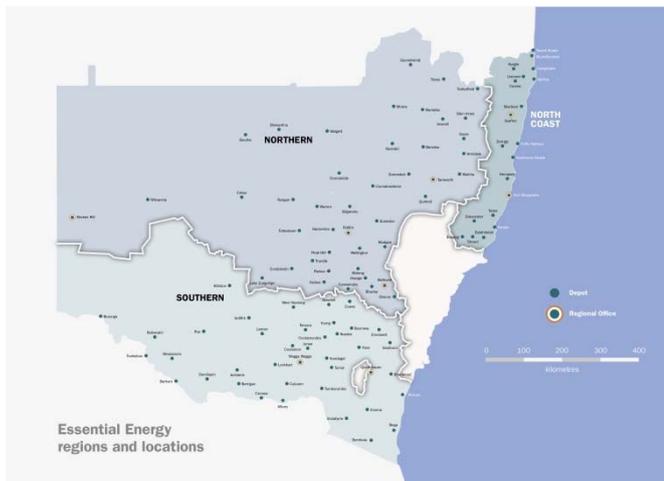
Overhead powerlines and underground electricity cables criss-cross land and waterways across the country, often unnoticed. They are essential to provide electricity to our communities.

Stay safe on the farm

It is easy to overlook the risks posed by electricity around properties. Powerlines cross many access roads and paddocks, posing a potential threat to operators of high machinery. You don't even need to touch overhead powerlines to compromise safety. Electricity can jump (arc) from powerlines to other objects in an instant. Powerlines carry considerable electrical current that can cause serious injury or even death if any part of your machinery touches or gets too close.

Essential Energy's network area

Essential Energy covers 95 per cent of NSW, encompassing regional and rural areas with differing terrain where overhead powerlines may be present in unusual or unexpected locations.



Powerline heights

The height of overhead powerlines varies significantly with changing topology. Powerlines across gorges and valleys change from less than 12 metres above ground level to hundreds of metres above valley floors.

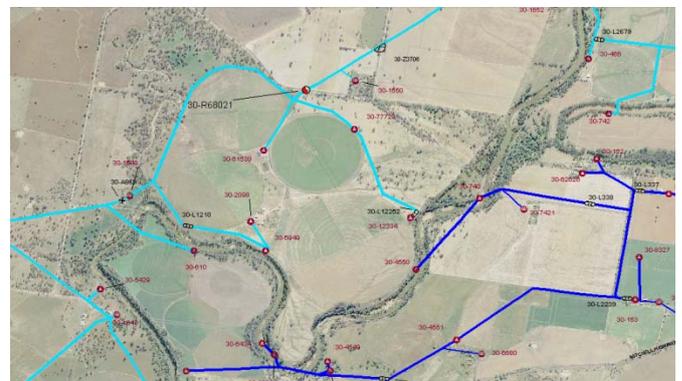
Note: Overhead powerlines can also be as low as 5.5 metres and can be difficult to see due to their size and their tendency to blend into the background at dawn and dusk.

Overhead electrical network maps

Maps showing the general location of our overhead electricity network are available upon request for individuals and groups involved in activities including:

- aerial spraying, aerial mapping, aerial inspections
- leisure activities such as hot air ballooning, gliding or parachuting
- farming
- general aviation
- general water activities
- operating high machinery.

An example map is below:



How to request maps

Email us at overhead.maps@essentialenergy.com.au and include the following information:

- address and property name
- a brief overview of your type of activity
- a completed "Supply of GIS Data" disclaimer form available at essentialenergy.com.au/overhead
- your contact details - including a phone number.

The map will be supplied as a PDF document. Other formats are available upon request (i.e. Google Earth, MapInfo, Microstation). Please note that imagery may not be available for your location.

For information regarding the underground electricity network, please contact **Dial Before You Dig** on 1100 or visit www.1100.com.au

Safety while undertaking aerial activities

For more information, Essential Energy can provide a copy of our Low level aerial activity safety fact sheet, or you can download it online at essentialenergy.com.au/safety

Be safe, because they need you



How to use overhead network maps

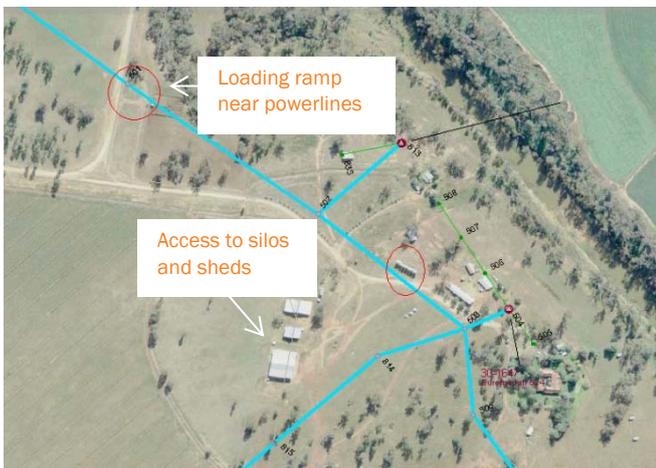
Assessing the aerial location of powerlines overlaid geographically onto an image of your property could help you locate powerlines situated in potentially hazardous locations. Once identified, you will need to take appropriate action to control the risk, which may include advising others of the location of the powerlines on your property.



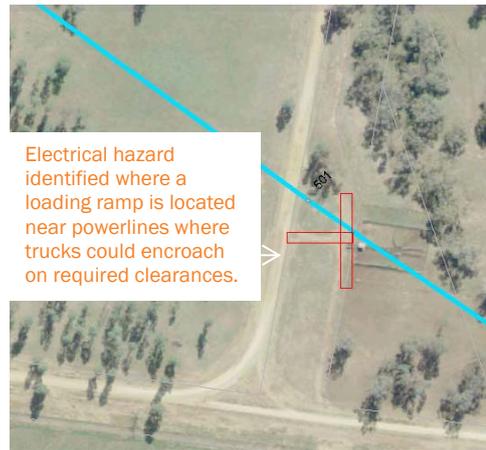
Above: This example highlights access routes and long powerline spans across paddocks*

Possible electrical hazard areas that could be identified may include:

- access routes where powerlines cross roads
- silos
- locations where powerlines cross paddocks, especially where poles blend into the background against things like sheds and trees.
- loading ramps.



Above: This example highlights the location of stockyards, silos and loading ramps*



Above: This example shows a loading ramp that is located near overhead powerlines, potentially exposing vehicle operators to electrical hazards*



Above: At different points, road access to sheds, silos and the house may pass under powerlines*

For more information

Essential Energy's Public Safety team is available to facilitate electrical awareness sessions and answer any questions relating to electrical safety. For more information on electrical safety, please call Essential Energy:

General enquiries **13 23 91**
Power outages **13 20 80**

Follow us  

or visit essentialenergy.com.au/safety

Essential Energy recommends you familiarise yourself with the latest SafeWork NSW Code of Practice 'Work near Overhead Powerlines', which can be viewed at www.safework.nsw.gov.au or you can purchase a copy of the Code of Practice by contacting SafeWork NSW on 13 10 50.

*Overhead maps provided by Essential Energy show powerline locations only – they will not highlight risk areas or locations as provided in the examples above. It is the responsibility of the requestor to review the maps and identify risk areas.

Safety first:

1. Know your access routes
2. Don't locate storage areas near powerlines
3. Mark sure you identify hard to see powerlines
4. Check that overhead powerlines are not low or damaged
5. Ensure clearance distances between machinery and powerlines are maintained.