two metres away from power lines. If they are not, arrange for tree pruning by a competent vegetation control contractor. Check the Yellow Pages or contact the Tree Guild of WA for a list of trained contractors:

- check wood poles for obvious defects such as poles which are cracked, damaged, rotting, attacked by white-ants/termites and ask your white-ant/termite inspector to treat (if required) the area around the poles;
- inspect steel poles regularly (eg every year). Steel poles, even if galvanised, are subject to rust and should be checked above and below ground for defects; and
- check all poles for leaning, brackets pulling away from poles/buildings, damaged stay-wires, split cross-arms broken strands in wires, damaged insulators or wires hanging much lower than others in the same section.

If you come across any of these defects during a visual inspection, immediately arrange for further inspection or repairs by a licensed electrical contractor.

## Life expectancy of wood poles

Australian Standards indicate a life expectancy of up to 40 years above ground and 25 years below ground for hardwood poles. However, the life expectancy of wood poles can vary significantly depending on their uses, species, climatic conditions and soil conditions.

If your poles are hardwood, such as jarrah, it is recommended that you replace all those which have been in service for more than 25 years. The difficulty in detecting internal deterioration and rotting in hardwood poles makes age-based replacement the only reliable option.

Alternatively, if your poles are softwood, such as treated pine, it is recommended that you seek information from the manufacturer or your supplier (if known) about the life expectancy. You should then replace those poles that are older than the indicated serviceable life.

If your poles are made of sawn timber, you should immediately replace them. Sawn timber is not suitable for power poles as it is more prone to rot and structural deterioration, with a high risk of early failure.

Groundline reinforcement using galvanised steel stakes can also extend the life of wood poles. Such an option should only be considered if the reinforcement work is performed by an asset management company specialising in such activities.

## My power poles need replacing. What are my options?

#### a. Underground

If the private power poles or lines on your property exceed their serviceable life, it is recommended that you consider replacing them with an underground cable.

The benefits of an underground cable are:

- it is far safer than an overhead line. It eliminates the risk of starting a bushfire and the risk of electrocution through contact with farm equipment is minimised:
- an underground supply is far more reliable, not affected by weather or vegetation; and
- · it does not require maintenance.

Please discuss this option with your licensed electrical contractor. In some cases, you may be able to negotiate a discount by digging the trenches yourself. Before digging, check for other underground services that may be present.

#### b. Pole replacement

Should your overhead power lines need substantial repair and you decide to continue with overhead power lines, you should use new steel poles and insulated wires. Regulations will be amended to require this. Wood poles and bare overhead wires will then no longer be allowed. Ask your electrical contractor for advice.

#### **Contacts**

If you have any questions about the information in this brochure or on the ownership of the overhead power lines, please contact:

Western Power – 13 10 87

Horizon Power - 1800 267 926

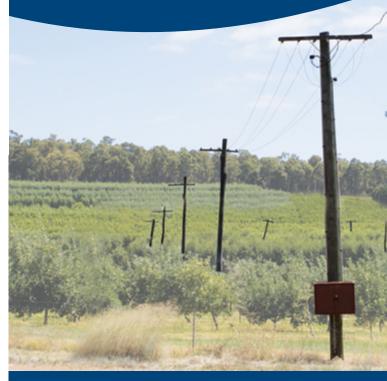
This brochure can also be downloaded at www.energysafety.wa.gov.au

Are you bushfire ready?
Go to www.areyouready.wa.gov.au



Government of **Western Australia** Department of **Commerce Energy** *Safety* 

# Private power poles and lines



Owner's safety and responsibility

DP0068/2013/ September 14/ 50000 ESWA E055



### Private overhead power lines

Power lines which transport electricity from your main switchboard and meter to your home or other buildings are private power lines. This includes the pole where the network operator's overhead service cable is attached and/or the switchboard/meter box is located.

If you have private power lines or a private power pole on your property, it is your responsibility to inspect and maintain them. Keep trees and branches clear of the power lines. This will help prevent power interruptions and reduce the possibility of electrocution or fire.

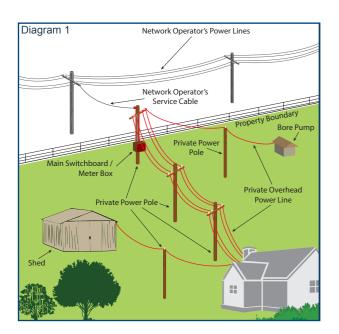
This is not a new requirement. It has always been the property owner's responsibility to maintain all electrical equipment they own.

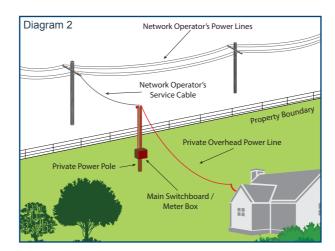
## What overhead power lines are we talking about?

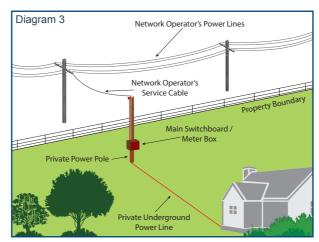
All private poles, wires and pole-top fittings located on the owner's property are his/her responsibility. The following diagrams show some common private power line arrangements.

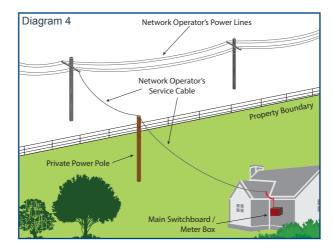
If you are unsure about the ownership of power lines on your property, please contact:

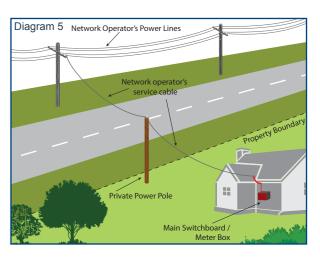
Western Power - 13 10 87 Horizon Power - 1800 267 926

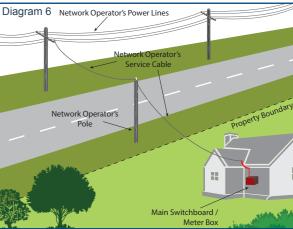












# Inspections of private overhead power lines and poles

It is important that you inspect your private power lines and poles (including stay-wires, fittings and all other components) at least once a year to check for any visible signs of deterioration. Never climb a pole, approach the wires, attempt any electrical repairs yourself or cut any vegetation near an energised power line. Contact with live wires can kill!

It is recommended that you:

- safely remove any vegetation on the ground close to the base of all power poles and under the power lines;
- check that trees and branches are at least