# Private Overhead Electric Lines

## Understanding your responsibilities

CITIPOWER

Powercor AUSTRALIA

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## CitiPower and Powercor Australia - Your Electricity Distributors

Depending on which electricity network area you live, CitiPower or Powercor are your electricity distributor. Your electricity distributor delivers to you the power you buy from your electricity retailer. Your retailer sends you your power bill and they pay us directly for distributing your power. Distributors do not sell you electricity.

Our aim is to provide you with a safe and reliable power supply, to respond to any electricity interruptions that may occur and to restore supply as quickly as possible.

## Private Overhead Electric Lines - Your Responsibilities

Every Year Victoria faces the risk of bushfires. Bushfires can devastate individual lives and communities and for this reason proper preparation is essential. Your distributor works closely with CFA and the Metropolitan Fire and Emergency Services Board (MFB) to reduce the risk of bushfires in Victoria by undertaking an extensive inspection and vegetation clearance program each year. Part of this program includes the inspection of Private Overhead Electric Lines.

This brochure outlines your responsibilities as a landowner with a Private Overhead Electric Line (POEL), and your distributor's responsibilities, whether your distributor is CitiPower or Powercor.

Your distributor will inspect your POEL up to the first switchboard at least once every three years to ensure it meets the standards required under the Electricity Safety Act 1998. If your line does not meet the standards required, your distributor is obliged to inform you of the defects identified on your line and issue you a written Defect Notice.

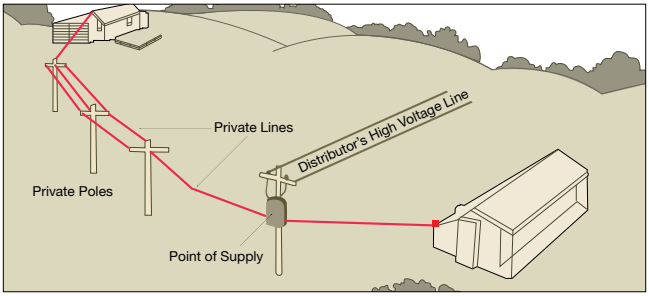
It is your responsibility to ensure that any defects on your private line are repaired within the timeframe specified on the Defect Notice.

If you receive a Defect Notice, you will need to engage a Registered Electrical Contractor (REC) to repair any non-vegetation defects. A Certificate of Electrical Safety (CES) must be issued when repairs are complete. The CES is your guarantee that the repairs meet the safety standards specified in the Act.

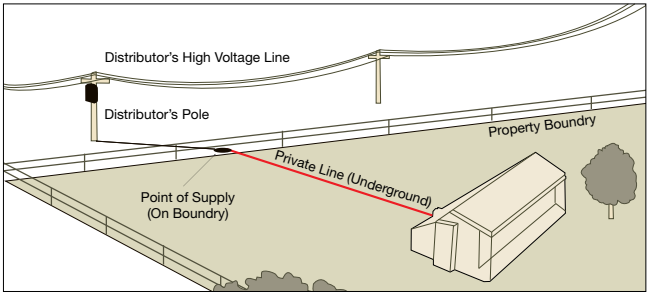
Vegetation Defects may be rectified by a professional Tree Clearing Contractor or other competent person. Your distributor must be advised in writing when all identified Defects have been rectified.

# Where Your Line Begins

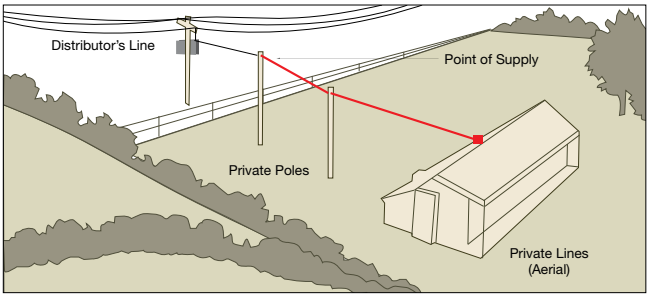
Your POEL is your responsibility. The following diagrams will assist you in determining whether or not you have a POEL, and where it begins.



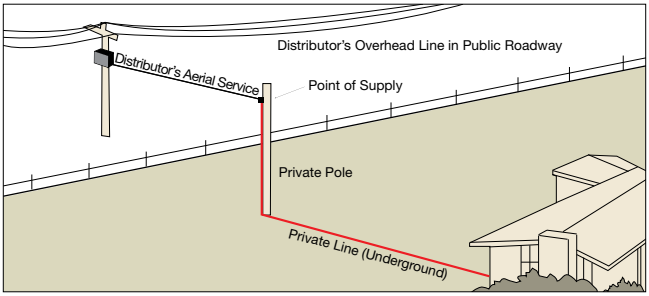

The above diagram shows your distributor's pole on privately owned property. The Point of Supply is where the property owner's line is connected to the distributor's pole.



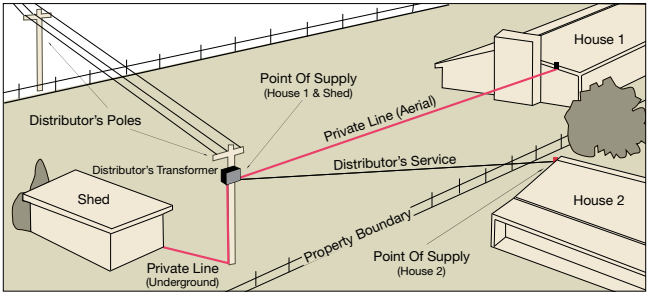

The Point of Supply in this instance is where the underground conductor crosses the property boundary. A pit will normally define this point.




Your distributor's service in this case is on a public roadway. The conductor is carried on to the land by private poles and the Point of Supply is at the first pole on the customer's property. The pole and the hardware on the pole are owned by the customer.

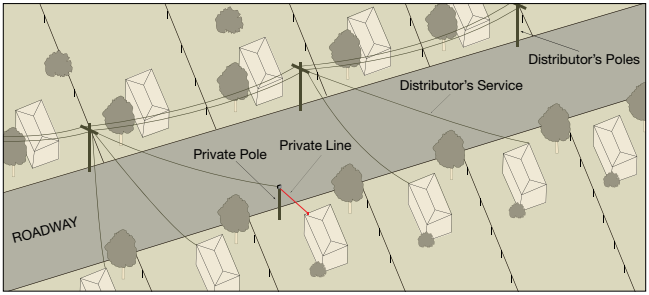



In this case, the power is carried onto the customer's property by an overhead line, connects to a private pole and then changes to an underground conductor. The Point of Supply is where the distributor's conductor attaches to the customer's privately owned pole.




This diagram shows our pole servicing two customers. The distributor's pole is on one customer's property. The conductor from our pole to the customer on the same property are POELs, the conductor servicing the neighbour is your distributor's conductor.

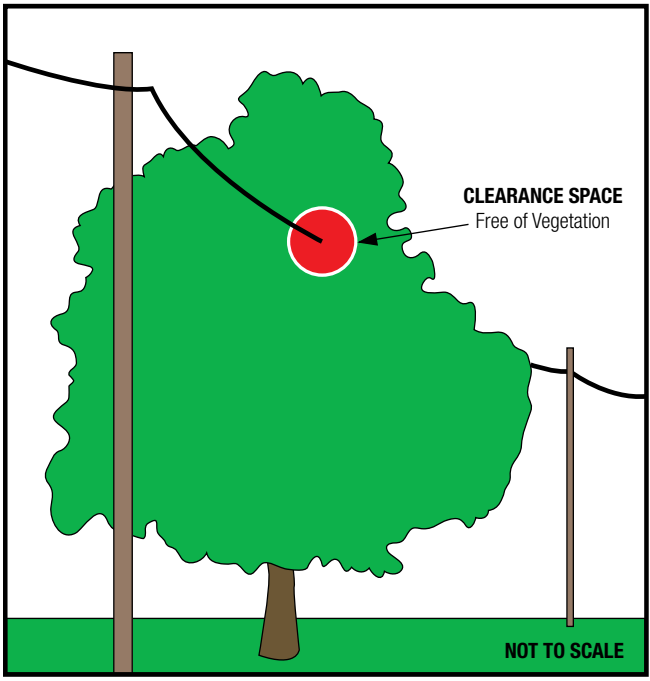
The pole and the hardware on the pole are your distributor's responsibility to maintain.




In this case the power is carried onto the customers property by an overhead line, connected to a private pole. The pole and the hardware on the pole are owned by the customer.

# Vegetation Defects

## Trees Within Powerline Clearance Space – Insulated Conductors

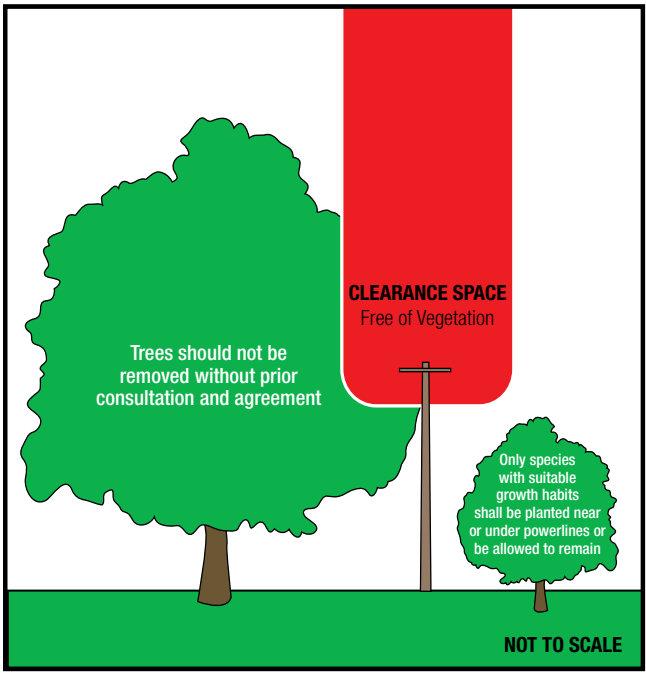



Trees and other vegetation within the powerline clearance space may cause fires, blackouts or other problems.

Your distributor will advise you if vegetation works are required on your private line. We recommend that a professional Tree Clearing Contractor be engaged to clear the line.

Vegetation should be trimmed away to ensure it will not cause any damage to the conductor.

## Trees Within Powerline Clearance Space – Bare Wires




**Under no circumstances climb the pole or approach the wires yourself.**

**CONTACT WITH LIVE WIRES CAN KILL**

We strongly recommend the use of a professional Tree Clearing Contractor when clearing vegetation within the proximity of bare wires. You should consider removing vegetation that will require continual pruning.

**NEVER PRUNE NEAR HIGH VOLTAGE POWERLINES**

### Guide to Minimum Vertical and Horizontal Clearance

| **Type of Conductor** | **Span up to 45 metres** Vertically below & horizontally | **Span of 45-70 metres** Vertically below & horizontally |
|---|---|---|
| Bare Wire | 1.5m | 2.0m |

# Non–Reportable Defects

## Termites

Termites can damage your private pole. Although termite infestation is not a reportable defect, you will be notified as a courtesy if termites are detected during an inspection. Failure to treat termites may lead to substantial reconstruction or replacement of your private line. Termite infestation must be treated by a Registered Pest Controller as Australian Standards apply to pest control.

## Pole Able to be Climbed

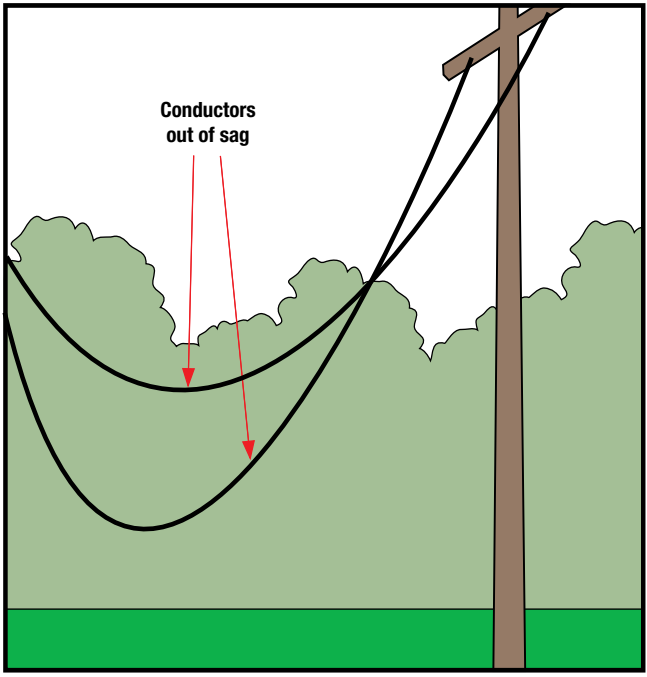
Serious injury or death may result from contact with overhead lines. Although it is not mandatory that private poles be fitted with a guard, your distributor will advise you to do so if your poles are able to be climbed and you have an open wire service. Any competent person may fit a pole guard.

# Electrical Defects

## Conductor to Conductor Clearance

Clearance between conductors must be maintained to reduce the risk of them clashing during windy weather. Clashing conductors are a fire risk and can cause damage to the conductors. Your REC may install larger cross arms or spreaders to increase the conductor clearance. It may also be possible to resag the conductor. If these options are not suitable, consider installing an underground conductor. Work must be performed by a REC, and a CES must be issued upon completion of the work.

# Conductors Out of Sag




If one conductor hangs much lower than the others on the same span, they are “out of sag”. When this occurs, there is increased danger of the conductors clashing (see above). Conductors may become out of sag if the cross arms or king bolt on the pole have deteriorated, if the pole has twisted or if the conductors were struck by tree limbs or machinery. In order to minimise the dangers posed by this situation, a REC must be engaged to rectify the defect. The REC may provide advice about the most suitable option to pursue in this instance. Work must be performed by a REC, and a CES must be issued upon completion of the work.

## Low Conductor Ground Clearance

Contact with overhead conductors can be fatal. To ensure your safety, conductors must meet minimum height requirements. If possible, a REC may be able to untie and resag the conductor. If this cannot be done, consider using raiser brackets or installing an underground conductor. Work must be performed by a REC, and a CES must be issued upon completion of the work.

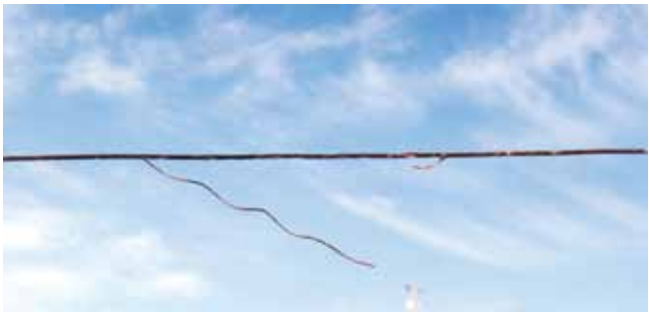
## Conductor Building Clearance


(Refer to table on page 16)

Minimum distances between buildings and conductors are required to reduce the risk of accidental contact. Conductors may be rerouted to obtain acceptable clearances. If this is not feasible, installation of underground conductors may be an option. Work must be performed by a REC, and a CES must be issued upon completion of the work.

## Conductor Damaged

Damaged conductors are dangerous. If the conductor is insulated and any of the insulation is missing or damaged, the exposed wire may be live. Contact with this could be fatal, and vegetation touching the conductor in this area is more likely to start a fire. Attempting to “re-insulate” a conductor may compromise the safety of the installation.



If the conductor is bare and unravelling (see image above) the danger of accidental contact leading to serious injury or death is increased. Insulated conductors should be replaced, not repaired. If more than 20% of the conductor needs to be replaced, the entire line will need to be placed underground. Conductors will be repaired by a REC under certain circumstances. Replacing or repairing conductors must be performed by a REC, and a CES must be issued upon completion of the work.

## Spreaders Missing or Damaged

Spreaders must be fitted to each span of overhead bare open wire conductors in high fire danger areas. This will ensure that adequate conductor clearances are maintained (see page 9). Only a REC may fit or replace spreaders, and a CES must be issued upon completion of the work.

# Defective/Broken Stays

A stay or guy wire is used to help keep your pole straight. A stay will usually have an insulator attached. When the stay, guy or insulator is damaged, risks such as an accidental earthing are increased. If your pole develops a lean, other defects such as conductor to ground clearances, conductor to conductor clearances or damaged hardware may result. Work must be performed by a REC, and a CES must be issued upon completion of the work.

## Deteriorated Cross Arms

Cross arms on POELs are normally made from timber. Over time, the timber can deteriorate due to weather, termites or fungal rot. As the cross arms carry the wires from pole to pole, it is important to ensure that they are maintained in good condition. If the cross arms need to be replaced, contact a REC, and a CES must be issued upon completion of the work.

## Deteriorated Pole

A private pole may be made from timber (treated hardwood, untreated hardwood, treated pine) or steel (tubular or solid). Your distributor will inspect and test private poles at least once every three years to ensure that the pole meets the required standard.

If your private pole is found to be sub-standard, your line may require substantial reconstruction and you may be required to place the whole line underground (see page 4). If substantial reconstruction is not required, your REC will advise you on the most appropriate course of action to follow. Work must be performed by a REC, and a CES must be issued upon completion of the work.

# Attachment Defects

The defective items shown on this page indicate that your POEL requires attention. Neglecting these parts of your POEL can compromise your safety and jeopardise the continuity of your supply.

Depending on the state of the defective items, these repairs can be classified as Non-Urgent, Urgent-Safety or Hazardous Defects. Repairs and maintenance on these items must be performed by a REC, and a CES must be issued upon completion of the work.

Defective, Cracked
or Chipped Insulators

Defective Ties

Defective Point of Attachment

Defective Meter Box

Defective Service Fittings


Defective Hardware

# Table of Clearances

## Minimum Building Clearances

| Type of Conductor | Areas Normally Accessible by Persons | Areas Not Normally Accessible by Persons | Horizontal Clearances from Wall | Clothes Lines, TV Aerials, Stay Wires etc. | Above Swimming Pools | Telecom Conductors |
|---|---|---|---|---|---|---|
| Bare Live Conductor | 3.7m | 3.0m | 2.0m | 2.0m | Not permitted | 1.2m |
| Insulated Live Conductor | 3.0m | 2.0m | 1.0m | 2.0m | 3.0m | 0.6m |
| Neutral Screen Conductor | 2.7m | 0.5m | 1.0m | 2.0m | 3.0m | 0.6m |

Contact with overhead lines can kill. It is important that overhead electric lines are high enough to prevent accidental contact.

## Minimum Ground Clearances

| Type of Conductor | Over Areas Used by Vehicles | Over Areas not Used by Vehicles | Over Areas Where Sailing Craft or Irrigation Pipes Are Used |
|---|---|---|---|
| Bare Live Conductor | 5.5m | 5.0m | Not Permitted |
| Insulated Live Conductor | 4.6m | 3.0m | 5.5m |
| Neutral Screen Conductor | 4.6m | 3.0m | 4.5m |

# Terminology

**REC -** Registered Electrical Contractor. Only engage an electrician who is registered to practice in Victoria. Only a REC is licensed to do work on your installation. A REC is the only person who can issue you with a CES.

**CES -** Certificate of Electrical Safety. This is issued by a REC upon completion of electrical work. This is your guarantee that the work performed on your line complies with the standards set by ESV.

**ESV -** Energy Safe Victoria. ESV is the regulatory body which sets all safety regulations and guidelines and oversees the safety of electrical installations in Victoria. ESV is able to grant an extension of time or an exemption from the regulations in relation to defects on POELs.

**POEL -** Private Overhead Electric Line. A POEL is owned by the customer and carries electricity from the Point of Supply to the customer. The POEL must supply the customer exclusively. It is the customer's responsibility to maintain this line. Your distributor will inspect the line at least once every three years, and if the line is found not to comply with the prescribed standards, a Defect Notice will be issued.

**Defect Notice** A Defect Notice is formal, written notification that your POEL requires attention in order to meet the regulatory standards. A Defect Notice will list all identified defects, advise you if the defects are urgent and whether or not the property owner is required to place the private line underground.

**POS -** Point of Supply. This is the point at which our service ends and your private line begins. For a POEL, we are responsible for conductors and poles up to the point where our conductor hooks onto the customers POA. (See page 4).

# Terminology (cont.)

**POA -** Point of Attachment. The POA is the privately owned equipment to which our conductor attaches.

**Non-Urgent Defect -** A Non-Urgent Defect does not pose an immediate threat. Non-Urgent Defects must be repaired within 60 days.

**Urgent Safety -** An Urgent Safety Fire Defect compromises the continued safety of your installation and is potentially dangerous. An Urgent Safety Defect must be repaired within 30 days.

**Urgent Fire Defect -** An Urgent Fire Defect poses an immediate bushfire risk. If your line is assessed as having an Urgent Fire Defect, on days of total fire ban this defect is re-rated to Hazardous.

**Hazardous Defect -** A Hazardous Defect is considered to pose an unacceptable risk to the safety of residents as electrical failure or combustion may be imminent. Due to the extreme danger posed by Hazardous Defects, the supply of electricity to the affected installation is immediately disconnected upon identification of the defect. Power is restored when defects are repaired.

**TFB -** Total Fire Ban days are declared by CFA. On TFB days, your distributor is required to disconnect private lines with outstanding Urgent Defects.

**Substantial Reconstruction -** If more than 20% of the poles or conductors of your POEL needs to be replaced and the installation is in an area not classified as low bushfire risk by CFA, the POEL must be placed underground. This requirement is detailed in the Electricity Safety Act 1998, and the Electricity Safety (Installations) Regulations 2009.

## Who do you contact?

If you have any questions about the information in this brochure or your private electric line, please contact:

**CitiPower and Powercor Australia**
**POEL Customer Service**
General Enquiries 13 22 06
Facsimile (03) 9683 4190

**Powercor Australia**
**Service Difficulties and Faults (24 hours)**
13 24 12
Telephone Interpreter 13 14 50

**CitiPower**
**Service Difficulties and Faults (24 hours)**
13 12 80
Telephone Interpreter 13 14 50

**Essential Services Commission**
1300 664 969
www.esc.vic.gov.au

**Energy Safe Victoria**
(03) 9203 9700
www.esv.vic.gov.au

**Energy and Water Ombudsman (Victoria)**
1800 500 509
www.ewov.com.au

**CFA**
www.cfa.vic.gov.au

**Victorian Bushfire Information Line (VBIL)**
1800 240 667 (TTY 1800 122 969)

**MFB**
(03) 9662 2311
www.mfb.vic.gov.au

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