

## Disclaimer

Ausgrid is registered as both a Distribution Network Service Provider and a Transmission Network Service Provider.

This document does not purport to contain all of the information that a prospective customer / third party would need to complete work near Ausgrid Assets.

This document, and the information it contains, may change as new information becomes available or if circumstances change. Anyone proposing to rely on or use the information in this document should independently verify and check the accuracy, completeness, reliability and suitability of that information for their own purposes.

Accordingly, Ausgrid makes no representations or warranty as to the accuracy, reliability, completeness or suitability for particular purposes of the information in this document. Persons reading or utilising this document acknowledge that Ausgrid and their employees, agents and consultants shall have no liability (including liability to any person by reason of negligence or negligent misstatement) for any statements, opinions, information or matters (expressed or implied) arising out of, contained in or derived from, or for any omissions from, the information contained in this document, except insofar as liability raised under New South Wales and Commonwealth legislation.



## Contents

	INTRODUCTION	4
	INTRODUCTION Important information on safe distances	4
* MARKED.	TYPES OF AUSGRID ASSETS	4
**************************************	ENSURING YOU ARE IN THE CLEAR NEAR OVERHEAD ASSETS	<u>5</u>
	OVERHEAD SERVICE CABLES	_ <u>U</u>
No.		<del></del>
		7
		8
	OVERHEAD DISTRIBUTION CABLES	9
	Keeping your distance	9
	Minimum Safety Clearances for "Distribution" overhead powerlines	9
a \	OVERHEAD DISTRIBUTION CABLES	10
	OVERHEAD DISTRIBUTION CABLES	11
THHAL.	WORKING NEAR OVERHEAD POWERLINES	_ 13
WHAT /		13
		14
		14
		15
		16
Ton -		16
14. CO.		10
THE STATE OF THE S		17
		;;
		1
		1
	Ausgrid BYDA Plans	1
T. D. LV	Carrying out excavation	1
	STREETLIGHTS	2
	ASSET RELOCATIONS	. 2
		2
		2
		2
		<u>2</u> 2
	CONTACT US	•
		Working safely near service cables and point of attachment Keeping your distance. Minimum Ground Clearances to Insulated Overhead Services OVERHEAD DISTRIBUTION CABLES Keeping your distance Minimum Safety Clearances for "Distribution" overhead powerlines OVERHEAD DISTRIBUTION CABLES OVERHEAD DISTRIBUTION CABLES OVERHEAD DISTRIBUTION CABLES WORKING NEAR OVERHEAD POWERLINES Minimum Safety Clearances when working near overhead powerlines (not service mains), and how to submit a 'Safety Clearance Enquiry' WORKING NEAR OVERHEAD POWERLINES Minimum Safety Clearances when erecting or dismantling scaffolding near overhead powerlines  14 WORKING NEAR OVERHEAD POWERLINES Minimum Safety Clearances when operating cranes and/or mobile plant (machinery) near overhead powerlines. WORKING NEAR OVERHEAD POWERLINES Minimum Safety Clearances when trimming trees or clearing vegetation near overhead powerlines. SUBSTATIONS Ausgrid Access/Clearance Requirements EXCAVATING NEAR AUSGRID'S UNDERGROUND CABLES OR CONDUITS Ausgrid's underground cables and conduits Ausgrid BYDA Plans Carrying out excavation STREETLIGHTS ASSET RELOCATIONS EXCAVATING NEAR AUSGRID POLES AND BUILDINGS EASEMENTS EXAMPLES OF ASSETS AND EQUIPMENT EXAMPLES OF ASSETS AND EQUIPMENT

## Introduction

## Important information on safe distances

Ausgrid has prepared this Guide to inform anyone working near an Ausgrid asset of the safe distances that must be maintained from electricity assets, overhead or underground, including poles and buildings. This Guide also applies to developers, designers and certifiers who are planning new work near Ausgrid assets.

Awareness of the required safety clearances and excavation requirements could mean the difference between a safe, successful project and a potentially fatal accident.

It may also save time and money by ensuring the design of a home or building complies with the safety requirements without additional measures being taken.

The drawings in this Guide specify the minimum safety clearances for working or living near electrical assets.

Note: Full details about safe work practices, including penalties for non-compliance, are set out in:

- The WorkCover NSW document Work near overhead power lines: Code of practice 2006.
- The SafeWork NSW document Work near underground assets Guide.

The State Environmental Planning Policy (Infrastructure) Regulation, 2007 (Division 5 - Electricity transmission or distribution, Subdivision 2 - Development likely to affect an electricity transmission or distribution network) is applicable to proposed developments near Ausgrid's electrical assets.

This Regulation requires local councils to seek comments from Ausgrid before approving any development application where electricity infrastructure is present.

Because of the critical nature of electrical distribution safety, please follow this Guide and be aware that Ausgrid is within its rights to seek compensation from companies building within clearance distances and / or asset owners will be required to relocate their assets at their own expense. Please contact Ausgrid on 13 13 65 for help.



## Types Of Ausgrid Assets

The Ausgrid network is made up of substations, powerlines, underground cables and power poles, spanning 22,275 square kilometers throughout Sydney, the Central Coast and the Hunter Valley regions.

The following illustrations show typical Ausgrid electrical network assets that may be found in residential and commercial areas, for example overhead powerlines & poles, underground cables (in conduits), pillars, streetlight on a pole, and a kiosk substation.



# Ensuring You Are In The Clear Near Overhead Assets.

For all new or proposed development or building works, please visit Ausgrid Safety Checker Tool on the Ausgrid website

https://www.ausgrid.com.au/Your-safety/Working-safely-around-the-network/Safety-Clearance-Checker/Map

All buildings and other structures must comply with the minimum safety clearances from overhead and underground electricity assets.

The minimum distances from the closest overhead conductor to the building or other structures must be maintained during strong winds or high operating temperatures. Under these conditions, the conductor can swing or sag considerably towards the building or structure.

The minimum safety clearances are shown in the illustrations in this guide taking these factors into account.

If it appears that overhead conductors are closer than the minimum safety clearances shown in the following table, visit the Overhead (OH) Clearance Enquiries page on the Ausgrid Website.

If excavation work is planned near Ausgrid assets, an understanding of Ausgrid's Network standard NS156 "Excavating Near Ausgrid Underground Cables or Conduits is essential.

### **Important Considerations for Minimum Safety Clearances**

☐ Knock-down/rebuilds, where a small,	single storey	home is r	eplaced by a	larger or
double storey home, or where land	is rezoned to	allow mu	lti-storey cor	struction,
such as apartments or town houses.				

- ☐ Moving the location of a driveway or building driveways close to pillars or poles.
- ☐ Erecting a flagpole.
- ☐ Any building work near underground and/or overhead power lines.

If you are unsure where to start, or Need Help To Plan, contact Ausgrid.

- Erecting a cubby house.
- ☐ Raising the ground level below existing power lines.
- ☐ Erecting metal fences or scaffolding near poles and/or overhead mains.
- ☐ Excavating near Ausgrid poles or stays.
- Excavating where electricity assets potentially run underground.
- ☐ Using a crane in proximity to overhead lines.

Swimming pools are potentially unsuitable for installation near electricity assets and should be assessed by Ausgrid.

## Overhead Service Cables

Overhead services cables (sometimes referred to as service mains) are the overhead cable/s (there may be more than one) from an Ausgrid pole to a point of attachment on a building or house.

## Working safely near service cables and point of attachment.

The point of attachment (POA) is where the electrical service cable attaches to a home or building. When work is being carried out near the point of attachment, special care must be taken to avoid contact with these electrical wires to avoid damaging them.

Care must be taken with activities such as:

Ц	Cleaning leaves from guttering.
	Painting gutters, fascia's, and eaves.
	Pruning trees and shrubs (particularly around the electrical wires).

- ☐ Attaching aluminum cladding to the fascia's and the eaves taking these factors into account.
- ☐ Replacing the guttering.

Keeping your distance

The minimum safety clearances for service cables are shown in the following table:

Remember - In some cases the required distances must be increased to ensure public safety.

If you are planning to work near any overhead powerline(s) please visit the Ausgrid website for more information, and for support on how to submit a Safety Clearance Enquiry – if required.

https://www.ausgrid.com.au/Your-safety/Working-Safe/Clearance-enquiries

Additional information can be found in the WorkCover- Work Near Overhead Power Lines Code of Practice.

 $https://www.safework.nsw.gov.au/\ data/assets/pdf\_file/0020/52832/Work-near-overheadpower-lines-code-of-practice.pdf$ 

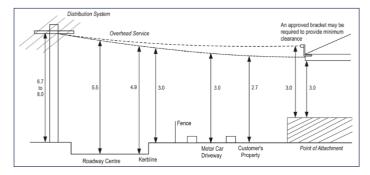
Table 1 - Minimum Safety Clearances for Overhead Service Cables

Approach distances for work near low voltage overhead service cables					
		Ordinary Persons (m)			
Hand held tools	Operation of crane or mobile plant	Handling of metal materials (Scaffolding, roofing, guttering, pipes, etc)	Handling of non- conductive materials (Timber, plywood, PVC pipes and guttering, etc)	Driving or operating vehicle	
0. 5	3. 0	4. 0	1 .5	0. 6	

#### Minimum Ground Clearances to Insulated Overhead Services

#### Side view of clearances

Note: These clearances must be achieved under all conditions (refer to Note 3 of Table 3-4 of the Service and Installation Rules of NSW). The Point of Attachment is to be 3m minimum above the ground, floor or platform level.



Additional clearance diagrams and information can be found in:

- Ausgrid Network Standard NS220 Overhead Design Manual
- The Service & Installation Rules of NSW

**Table 2 - Minimum Clearance Low Voltage Covered Service Conductors** 

	From the insulated service conductors to the surface of:	Minimum clearances (metres)
1	Any part of a freeway or arterial road	5. 5 vertically
2	The centre of a carriageway of a public road	5. 5 vertically
3	Any part of a carriageway of a public road (other than the centre)	4. 9 vertically
4	Vehicular crossing of a footway in a public road (other than a residential drive- way)	4. 5 vertically
5	Vehicular crossing of a footway in a public road for a residential driveway and any other part of a footway	3. 0 vertically
6	Land which is not associated with a dwelling and which is likely to be used by vehicles, including non urban small acreages and hobby farms	4. 5 vertically
7	Land which is, or is likely to be used by vehicles and is associated with a dwelling	3. 0 vertically
8	Land not likely to be used by vehicles	2. 7 vertically
9	Those parts of any structure normally accessible to persons. (See Note 1)	2. 7 vertically
10	Any area above a roof	1. 25 in any direction
11	Any area around a radio or TV aerial	1.8 in any direction
12	Those parts of any structure not normally accessible to persons. (See Note 2) (including below a projecting slab, balcony or sign)	0. 1 in any direction
13	The edge of any opening window, balcony, verandah, clothes line or fence etc	Out of normal reach (see Note 4)
14	Point of attachment	3m vertically not normally accessible without a ladder or other device (see Notes 1-4)
15	Farmland where mechanical equipment is used	5. 5 vertically
16	Trees and shrubs	0. 5 in any direction
17	Vicinity of boat ramps, launching areas (avoid if possible)	10. 0 vertically
18	Communications conductors	0. 6 in any direction

#### **Explanatory Notes:**

Interpret the requirements set out in the above table as follows:

- 1. Structure Normally Accessible to Persons includes:
  - (a) The whole area of any flat roof accessible without the use of a ladder.
  - (b) Any part of a hip or gable roof accessible without a ladder up to the nearest hip or gable.
  - (c) Any portion of a balustrade or other structure which will support a person and is accessible without a ladder.
- 2. Not Normally Accessible to Persons excludes roofs and includes any portion of a fence, balustrade, advertising sign or other structure which will not support a person or is not accessible without a ladder.
- 3. The minimum clearances in Service and Installation Rules of NSW Table 13.1.4 must be achieved under all conditions regardless of:
- (a) Conductor swing due to the influence of wind.
- (b) Conductor sag due to the influence of load current and ambient temperature.
  - 4. Out of Normal Reach means 1.25m from any normally accessible position. The requirement that an overhead service must be out of normal reach of persons may be achieved in some cases by the provision of a permanent insulated barrier (consult with the electricity distributor).

## Overhead Distribution Cables

Overhead distribution cables (sometimes referred to as distribution mains) are the overhead cables that generally run from an Ausgrid pole to another Ausgrid pole, or Ausgrid electricity asset such as a substation. These are generally rated at 230, 400, 11,000 or 33,000 volts.

## **Keeping your distance**

The minimum safety clearances over structures, roads and driveways are shown in the following drawings.

**Remember** -In some cases the required distances must be increased to ensure public safety.

If you are planning to work near any overhead powerline(s) please visit the Ausgrid website for more information, and for support on how to submit a Safety Clearance Enquiry – if required.

https://www.ausgrid.com.au/Your-safety/Working-Safe/Clearance-enquiries

Additional information can be found in the WorkCover- Work Near Overhead Power Lines Code of Practice.

 $https://www.safework.nsw.gov.au/\ data/assets/pdf\_file/0020/52832/Work-near-overheadpower-lines-code-of-practice.pdf$ 

## Minimum Safety Clearances for "Distribution" overhead powerlines

#### Table 3 - Minimum clearances from ground

Note: The required Ausgrid clearances are indicated in the table below with a cross reference to AS/NZS 7000:2016 clearances (the latter shown in brackets) for your information only.

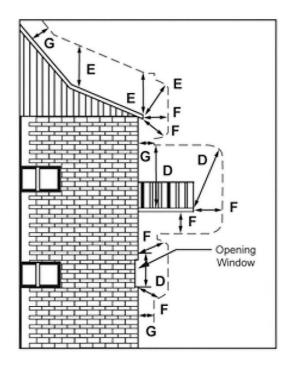
		Minimum Clearances in any direction between Conductors							
N O		Nominal System Voltage							
DIMENSION	LOCATION	LV insulated or bare	11kV, 22kV, and 12. 7kV SWER bare	11kV, 22kV, and 12. 7kV SWER covered	33kV	66kV	132kV		
		m	m	m	m	m	m		
А	Over the carriageway of roads	6. 0 (5. 5)	7. 5 (6. 7)	6. 0	7. 5 (6. 7)	7. 5 (6. 7)	7. 5 (6. 7)		
В	Over land other than the carriageway of roads	6. 0 (5. 5)	6. 0 (5. 5)	6. 0	6. 0 (5. 5)	7. 0 (6. 7)	7. 5 (6. 7)		
С	Over land which, due to its steepness or swampiness, is not traversable by vehicles	5. 0 (4. 5)	5. 0 (4. 5)	5. 0	5. 0 (4. 5)	6. 0 (5. 5)	6. 0 (5. 5)		

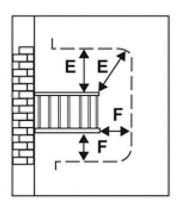
Low Voltage (LV) = 230/400V (single/three phase)

# Overhead Distribution Cables

Table 4 - Minimum clearances from structures, buildings and easement boundaries.

Z	7		LOW VOLTAGE			11kV – 33kV		
DIMENSION	LOCATION	Insulated	Bare neutral	Bare active	Insulated with earthed screen	Insulated without earthed screen	Bare or covered	Bare
		m	m	m	m	m	m	m
D	Vertically above those parts of any structure normally accessible to persons	2. 7	2. 7	3. 7	2. 7	3. 7	4. 5	5. 0
Е	Vertically above those parts of any structure not normally accessible to persons but on which a person can stand	2. 0	2. 7	2. 7	2. 7	2. 7	3. 7	4. 5
F	In any direction (other than vertically above) from those parts of any structure normally accessible to persons, or from any part not normally accessible to persons but on which a person can stand	1. 0	0. 9	1. 5	1. 5	1. 5	2. 1	3. 0
G	In any direction from those parts of any structure not normally accessible to persons	0. 1	0. 3	0.6	0. 1	0.6	1. 5	2. 5

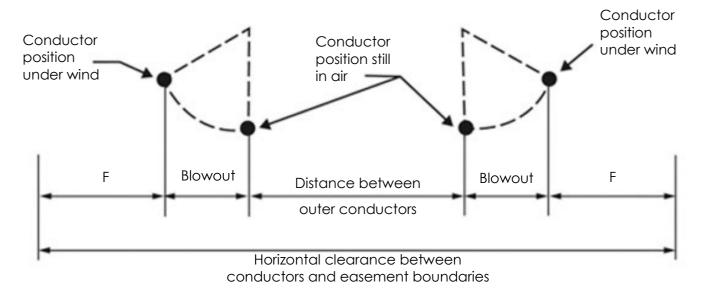




These dimensions apply if the height of the railing (or similar) plus distance E is greater than distance D

## Overhead Distribution Cables

#### Horizontal clearance between conductors



Note - Overhead powerline easements may be in place on private property. Please check the 'Title' of the land, or visit the Land Registry Office to complete a Title Search Home - NSW Land Registry Services (nswlrs.com.au).

For overhead powerlines located within a council or RMS roadway footpath, easements are not required.

#### Clearances between swimming pools and overhead conductors.

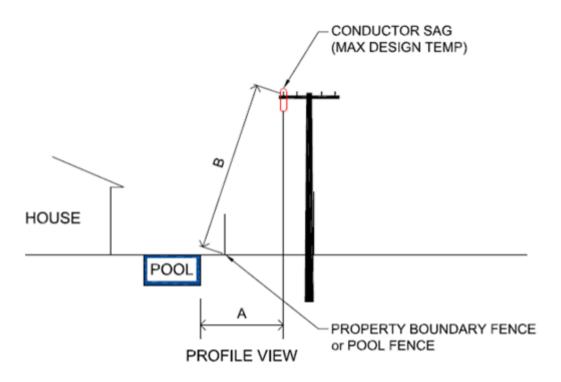
Swimming pools shall not be installed closer to overhead conductors than the distance specified in the following table

Table 5 – Minimum clearances from swimming pools and overhead conductors.

nsion	ision		Insulated service (see note 1)		LV		33kV and above (see note 2)
Dimension	Location	Option 1	Option 2	Insulated	Bare or covered	All	All
		m	m	m	m	m	m
Α	Horizontal distance from pool edge to closest conductor	3.5	1.5	1.5	2.5	2.5	2.5
В	Distance from nearest conductor to any point on the ground within the fenced pool area	4.6	6.5	6.5	7.0	7.5	8.0

#### Notes:

- 1. The designer shall select one of the two options for insulated service wires. Interpolation is not permitted.
- 2. Voltages above 33kV shall be referred to Ausgrid for a site-specific earthing assessment, which may require increased clearances.



MINIMUM CLEARANCE BETWEEN SWIMMING POOL AND OVERHEAD CONDUCTORS.

# Working Near Overhead Powerlines - Clearances.

## Minimum Safety Clearances when working near overhead powerlines (not service mains), and how to submit a 'Safety Clearance Enquiry'

If you are planning to work near any overhead powerline(s) please visit the Ausgrid website for more information, and for support on how to submit a Safety Clearance Enquiry.

Additional information can be found in the WorkCover - Work Near Overhead Power Lines Code of Practice.







#### Approach distances for work performed by 'Ordinary Persons'

\* An 'Ordinary Person' is someone without formal Ausgrid close approach training and authorisation.

Table 6 - Approach distances for work performed by 'Ordinary Persons'

Nominal phase to phase a.c. voltage (volts)	Approach distance (m)
Up to and including 132,000	3. 0
Above 132,000 up to and including 330,000	6. 0
Above 330,000	8. 0
Nominal pole to earth d.c. voltage (volts)	Approach distance (m)
Up to and including +/- 1500 Volts	3. 0

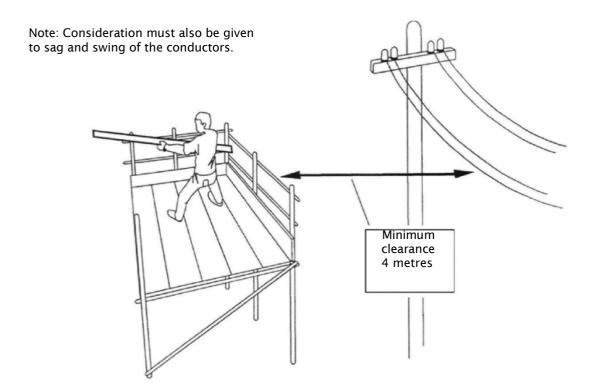
Note: Special approach distances apply for scaffolding work (Chapter 6) and/or work near low voltage overhead service lines (Chapter 8) - refer WorkCover - Work Near Overhead Power Lines Code of Practice.

# Working Near Overhead Powerlines - Scaffolding.

## Minimum Safety Clearances when erecting or dismantling scaffolding near overhead powerlines

If you are planning to work near any overhead powerline(s) please visit the Ausgrid website for more information, and for support on how to submit a Safety Clearance Enquiry – if required.

Additional information can be found in the WorkCover - Work Near Overhead Power Lines Code of Practice.





## Working Near Overhead Powerlines - Mobile Plant.

## Minimum Safety Clearances when operating cranes and/or mobile plant (machinery) near overhead powerlines.

If you are planning to work near any overhead powerline(s) please visit the Ausgrid website for more information, and for support on how to submit a Safety Clearance Enquiry – if required.

https://www.ausgrid.com.au/Your-safety/Working-Safe/Clearance-enquiries

Under no circumstances will Ausgrid permit craning loads over live High Voltage (HV) mains.

You MUST contact Ausgrid to review all 'craning over' activities.

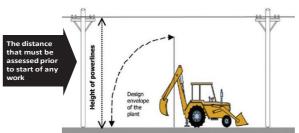
Additional information can be found in the WorkCover- Work Near Overhead Power Lines Code of Practice.

 $https://www.safework.nsw.gov.au/\ data/assets/pdf\_file/0020/52832/Work-near-overhead-power-lines-code-of-practice.pdf$ 









## Working Near Overhead Powerlines - Vegetation Control.

## Minimum Safety Clearances when trimming trees or clearing vegetation near overhead powerlines.

If you are planning to work near any overhead powerline(s) please visit the Ausgrid website for more information, and for support on how to submit a Safety Clearance Enquiry – if required.

https://www.ausgrid.com.au/Your-safety/Working-Safe/Clearance-enquiries

Additional information can be found in the WorkCover - Work Near Overhead Power Lines Code of Practice.

 $https://www.safework.nsw.gov.au/\ data/assets/pdf\_file/0020/52832/Work-near-overhead-power-lines-code-of-practice.pdf$ 

If you would like to know more about suitable species of trees to plant in proximity to Ausgrid powerlines please visit the Ausgrid website.

https://www.ausgrid.com.au/-/media/Documents/In-your-community/Councils/Suitable-Planting-Species.pdf

## Substations

## **Ausgrid Access/Clearance Requirements**

Substation sites shall have unimpeded access for Ausgrid personnel and vehicles, directly from a public street, for 24 hours per day, 7 days per week.

A heavy truck with a vehicle-mounted crane is required to install or remove the kiosk and equipment. Access routes, where required, shall be suitable under all weather conditions and constructed to withstand the maximum road legal wheel loadings and loadings during kiosk installation.

The access route shall be a minimum of 4 metres wide, have a minimum of 4 metres headroom, provide increased width for turns where required and be continuous from the property boundary to the kiosk site.

For substation sites other than footpath, reserve or URD sites, the site owner/customer shall be responsible for providing and maintaining access routes and surface finishes, to the satisfaction of Ausgrid, as specified in the easement document.

Access from the street to the substation site shall not be fenced or enclosed, except where approval is given in writing by Ausgrid and the conditions listed in the approval are complied with on an ongoing basis by the site owner/customer.

**Note:** - Ausgrid's suite of Network Standards relate to all of our work types. Please refer to Network Standard NS141 (Site selection and preparation for kiosk substations) on our website for more information on substation/kiosk clearance requirements.

https://www.ausgrid.com.au/-/media/Documents/Technical-Documentation/NS/NS141

## Substations – segregation requirements from residences

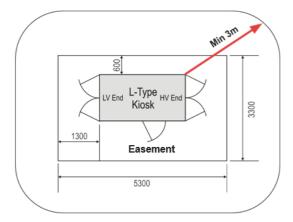
NOTE - Minimum 600 mm exit space all round kiosk from edge of open doors\_\_ Residential Substation boundary boundary 3000 mm \* No other structures in this zone (unless PLAN fire protected) 3000 mm<sup>3</sup> FGL boundary boundary \* This reduced distance **ELEVATION** of 3000 mm will be LEGEND reviewed for the next = Fire risk zone edition of this Standard

#### Substations - segregation requirements from other structures

NOTE - Ausgrid has varying easement sizes for different Substation types.

Easement shown below is only one example. No obstructions shall be placed within the substation easement.

Refer to Ausgrid Network Standard NS143.



Fire & Blast segregation, See NS141. RESTRICTED BUILD AREA

Any proposals to build fences or swimming pools near (pole or ground mounted) substations should be referred to Ausgrid for an Earthing assessment

# Excavating Near Ausgrid's Underground Cables or Conduits.

This Guide has been developed to provide workers planning to carry out excavation work within the Ausgrid network area, with an overview of their responsibilities and requirements to ensure:

- the safety of their workers and members of the public; and
- the integrity of the Ausgrid underground network.

This Guide is to be read in conjunction with the SafeWork NSW Guide - 'Work Near Underground Assets'.

#### Ausgrid's underground cables and conduits.

Ausgrid's underground cables and conduits can exist anywhere within the Ausgrid network area, even in some areas with overhead power lines.

#### **Ausgrid BYDA Plans**

For safety reasons it is extremely important to confirm the presence or absence of underground assets in the area of proposed excavation.

Persons who are planning the work must submit a Before You Dig Australia (BYDA) request before excavation commences.



Before You Dig Australia is a FREE national referral service supported by Ausgrid and other major service providers that provides information and plans for each utilities that have an interest in a particular location and the relevant contact details.

Once the plans are received, the person in charge of the work shall review the plans and assess the need to engage a utility location company to gain a more accurate location of such Ausgrid cables or conduits.

#### Notes:

- Ausgrid BYDA plans are valid for 30 days from date of issue.
- Ausgrid cannot guarantee the accuracy of our plans as they may not account for subsequent changes to road alignments, construction of fences or buildings etc. since the time of cable or conduit installation.

#### Carrying out excavation

All excavation work within the Ausgrid network area shall comply with Ausgrid's Network Standard NS156 - Excavating Near Ausgrid Underground Cables or Conduits.

https://www.ausgrid.com.au/-/media/Documents/Technical-Documentation/NS/NS156

#### Indicators of the presence of Ausgrid's underground cables or conduits.

During any form of excavation, careful observation of the excavated spoil can alert the worker to the presence of Ausgrid's underground cables or conduits.

A noticeable change in soil may indicate backfill material which could have been used in a cable trench.

Ausgrid cables and conduits may also be located below various forms of indication such as bricks, pavers, plastic strip or tape.



Cable trench with protective steel plates and orange PVC cover strip



Open trench showing electrical conduits installed.



Direct buried bitumen encased cable chased into rock.

#### Damage to Ausgrid's underground cables during excavation.

Damage to Ausgrid cables may result in the following consequences:

- Electric shock or burns to workers;
- Damage to plant and equipment;
- Interruption of electricity supply;
- Liability for the cost of repairs; or
- Fines or prosecution under various Acts and Regulations.

#### **Access to Ausgrid Network Assets**

Members of the public are not permitted to enter or gain access to an Ausgrid Network asset.

Only workers who are authorised by Ausgrid are permitted access to these Ausgrid assets.

If access is required, please contact Ausgrid 131365

## Streetlights

Street lighting is a vital community asset that helps our community feel safer and more secure. Ausgrid maintains 250,000 streetlights within our network area on behalf of local councils across Sydney, the Central Coast and the Hunter.

Although streetlights are connected to the Ausgrid network the responsibility for new streetlight approvals or removals resides with the local council, or the NSW Roads & Maritime Services (RMS) depending on the category of road (or bridge etc.).

Ausgrid is responsible for connecting and maintaining streetlights in their network area.

If you would like to report a streetlight that is not working please visit our website and "Report a faulty streetlight" via our online mapping system.

https://www.ausgrid.com.au/In-your-community/Our-services/Streetlights#!/map

If you would like to make a complaint about a streetlight (e.g. obtrusive light etc.) or request a new streetlight to be installed, please contact your local council. The council will assess your request/complaint and refer the matter to Ausgrid for further investigation/action to determine if the complaint is justified.



## **Asset Relocations**

If you would like to apply to relocate an existing Ausgrid asset (i.e. a pole, pillar, substation and/or underground cable etc.) please visit the Ausgrid website and follow the steps to submit a "Network Relocation Request Form".

https://www.ausgrid.com.au/Connections/special-connections/moving-poles-and-assets



# Excavating Near Ausgrid Poles and Buildings

Are you proposing to excavate at a depth that exceeds 300mm around the base of an Ausgrid pole or pole stay?

If so, Ausgrid has categorised all excavation works in the region of the pole or stay into "Zones of Influence".

If the controls for the work in the various zones are adhered to, your action will not jeopardise the integrity of the pole or stay.

In some situations, the local site conditions and Ausgrid pole construction types may necessitate additional pole support measures be put in place, (by Ausgrid) to ensure the structural integrity of the pole during the period of excavation.

Only Ausgrid can implement additional pole support measures (pole holding etc.)

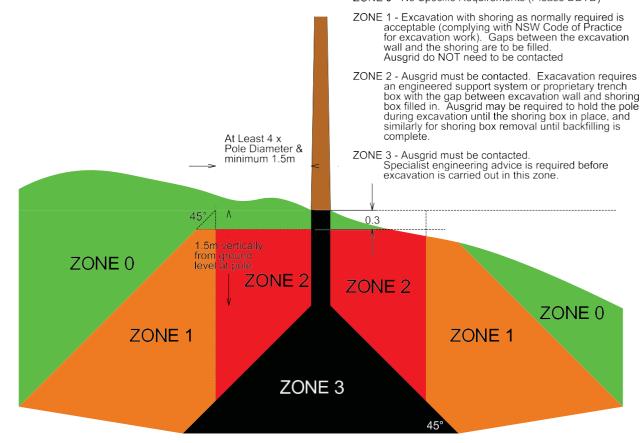
You MUST contact Ausgrid for all excavation work that could impact the structural integrity of a pole or other Ausgrid assets.

The 'Zone of Influence' drawings below provide an indication on potential excavation impacts on Ausgrid poles or assets.

Note: These diagrams are a guide only.

If you are excavating near an Ausgrid pole, please refer to the Ausgrid website for more information on how to make a Safety Clearance Enquiry.

https://www.ausgrid.com.au/Your-safety/Working-Safe/Clearancepgyliriessecific Requirements (Please DBYD)



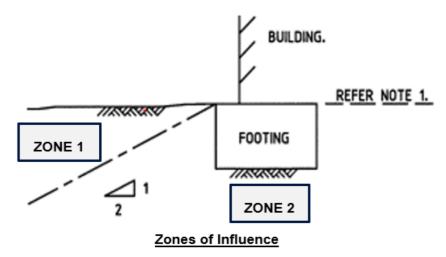
If your excavation is in the vicinity of any Ausgrid assets or structures, consideration shall be given to the risk of impacting on the stability of the structure. Such risk needs to be assessed by a competent person such as a civil engineer and any proposed support system shall be approved by Ausgrid.

Excavation work shall be carried out in a way that does not cause flooding or water penetration to any Ausgrid asset or adjacent structures.

It is also important that any buildings, structures, substations or buried assets in and around the excavation site are not adversely affected by ground movement or vibration during the excavation work.

For excavation work near buried cables refer to NS193 Ground movement, vibration and pressure limits near buried cables.

The 'Zone of Influence' drawing below provides an indication of potential excavation impacts on Ausgrid structures.



Zone 1: Excavation with shoring as normally required is acceptable.

For normal shoring requirements, refer to SafeWork NSW Code of Practice for Excavation Work

Zone 2: Specialist engineering advice is required and require Ausgrid approval before excavation work can commence in this zone.

Note 1: If the ground is built up above this line, seek engineering advice.

## Easements

An electricity easement provides 'right of way' for Ausgrid to access, maintain and repair overhead powerlines, underground cables, and substations on private property. While ownership of the land remains with the property, certain restrictions may apply to how the land can be used. Easements also exist for telephone lines, water and sewage mains and natural gas supply lines.

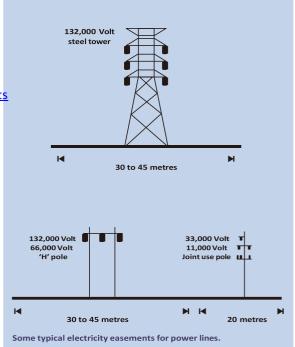
Key information is available in the NS143 Network Standard, Ausgrid Easement Information guide and on the Ausgrid website.

Please refer to the Ausgrid Easement guide for specific guidelines about:

- temporary fencing earthing requirements
- induction risk under lines for anything metallic (i.e. long runs of temp fencing, Colourbond fence replacement etc)
- the risk of transfer potential and need for isolation panels and fence earthing.
- dos and don'ts for stockpiling materials on easements, i.e.
  - storage of flammable materials
  - construction materials under our lines
  - parking trucks and trailers that COULD be climbable and in clearance.

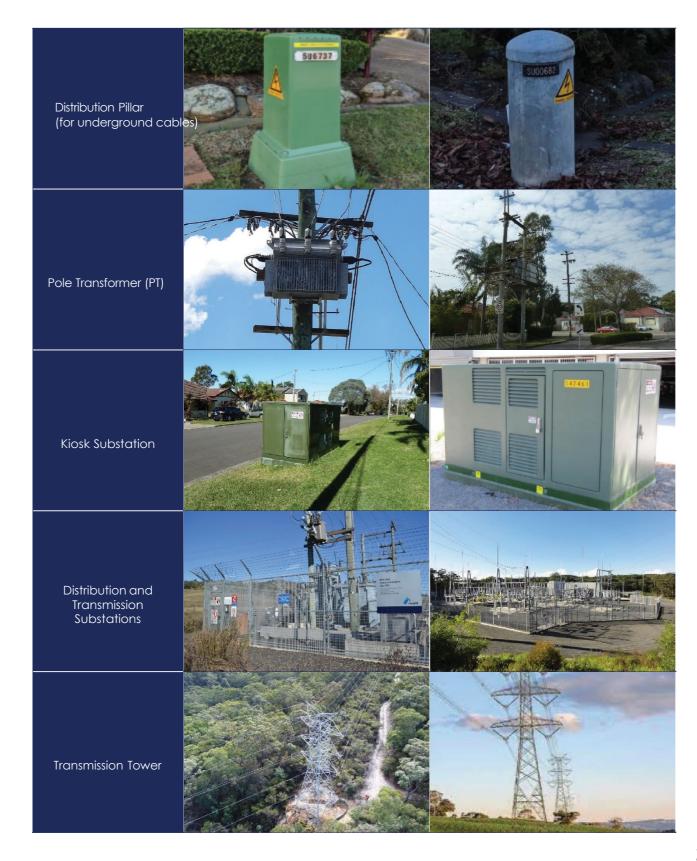
To make an Easement enquiry please visit the Ausgrid Website:

https://www.ausgrid.com.au/Contact-Us/Enquiries-and-complaints

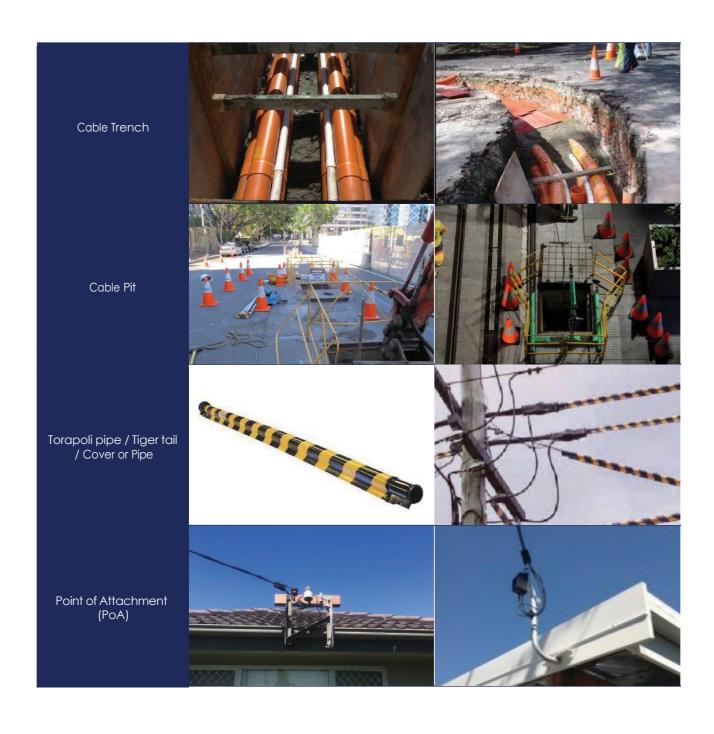




# Examples of Assets and Equipment



# Examples of Assets and Equipment



## **Contact Us**

## Power outage, hazard or emergency

## 13 13 88

24 hours a day, 7 days a week

## **General Enquiries**

## 13 13 65

Mon to Fri / 09:00 to 16:30

If you have any questions, comments or need further information, we'd be happy to hear from you.

## Correspondence

The Ausgrid postal address for correspondence is:-GPO Box 4009, Sydney, NSW 2001

### **Online**

For online contact please refer to the Ausgrid website 'Contact Us' page for:-

- · Checking or reporting power outages
- · Requesting repairs
- · Making a claim
- · Enquiries and complaints
- · Facebook and twitter links
- · Frequently Asked Questions

