

ASP Safety Alert

ASP Compliance and Practices



Alert Number: SA13_18

23 August 2018

Precautions for working near or around underground cables

Ensure minimum safety requirements from the following are applied when working in the vicinity of underground electrical cable systems:

- Current Dial Before You Digs (DBYD)
- Ausgrid Network Standard NS156
- WorkCover Guide – Work Near Underground Assets
- Guide to Code of Practices for Street Opening (NSW Street Opening Conference)
- How to Read Ausgrid Plans
- Authorised Personnel

Background

Ausgrid have observed a concerning spate of safety breaches and incidents associated with working near or around Ausgrid's underground electricity network.

The identified incidents involved;

- Unauthorised works within close approach to live low voltage, high voltage and transmission assets
- Authorised works performed outside of Ausgrid's requirements

Some of the recent incidents have resulted in damage to Ausgrid assets and had potential to cause significant impacts to the workers involved.



DBYD Legislative requirements prior to excavation works

NSW legislation requires you to obtain current Dial Before You Dig service and utility plans prior to commencing any excavation works. These plans can be obtained by calling '1100' or visiting '1100.com.au' and are valid for 30 days from time of issue. An in date set of plans must be onsite at all times. All assets installed within the proposed work area must be located prior to the commencement of any excavation work.

Network Standard NS156

Requirements outlined within Ausgrid Network Standard NS156 must be followed where working near underground electrical network assets. A pre work checklist is included within NS156, it is recommended that this checklist be completed prior to commencing any excavation works on site.

Toothed excavator buckets are not permitted when working near underground cables.

NS156 Working near underground cables definition

'Work near underground cables' includes any of the following:

- Any work which lowers or raises the surface level above cables or conduits or places a structure above cables or conduits
- Any work below the surface level and **within 2 metres either side of any transmission cable** or associated pilot cable
- Any work below the surface level and within 0.3 metres either side of any distribution cable
- Road boring work not already covered above, where the bore may pass within 2 metres of any cable or conduit



- Any other work, whether by hand or involving machinery or plant, which has caused, or may cause any of the following:
 - Hazards to persons from contact with cables
 - Damage to cables or conduits
 - Cables or cable protective covers or warning tapes or conduits or earthing conductors becoming exposed
 - Washout or removal of cable or conduit bedding material or backfill or replacement with different material
 - Collapse of cable trench
 - Cables or conduits being undermined or unsupported.

Near Ausgrid's underground mains and apparatus		
Nominal voltages (kV)		Approach distances X (m)
More than	Up to and including	
-	22	0.3
22	132	2.0

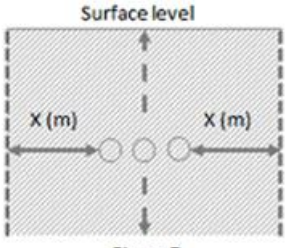


Figure Z

Note: Any work below the surface level and within x metres either side of Ausgrid's underground mains and apparatus is considered to be near Ausgrid's underground electricity network. (shaded area in Figure Z)

Excavation near transmission cables

Where cable plans (DBYD) identify "You are working near transmission cables" **it is compulsory to notify Ausgrid a minimum of two weeks prior to your scheduled start date.** Ausgrid will then arrange for a representative to attend the site during excavation work. Phone the Ausgrid Transmission enquiries line on **(02) 4951 9200** to arrange for an Ausgrid representative in your region or to discuss the intended works to be carried out and the associated safety precautions required.



Other documents you need to read

Where Ausgrid cables are located near your proposed work area, several other documents will be important in helping you understand your obligations and plan your work:

- Ausgrid Network Standard NS156
- WorkCover / Safe Work Guide – Work Near Underground Assets
- Guide to Code of Practices for Street Opening (NSW Street Opening Conference)
- How to Read Ausgrid Plans

Authorisation Requirements

In addition to the requirements above, it is imperative that appropriate precautions are included in company procedures to ensure that only appropriately accredited and authorised individuals are utilised for works being completed as specified in ES4.



Action Required

ASPs to communicate to all employees, contractor's supervisors and project managers the hazards associated with working on or near Ausgrid's Network and requirements for following approved Safe Systems of Work, Ausgrid Network Standards and Electrical Safety Rules.

Ausgrid Project Officers