

ASP Safety Alert Electrical Safety & Authorisations

Alert Number: SA12_19

12 September 2019

Subject: Working on or near underground low voltage cables with conductive sheaths

Key Messages

Hazardous voltages can be present when working on or near underground low voltage cables with conductive sheaths. These cables can be found on our low voltage and streetlighting networks. People can come within proximity of these cables in places like pits, joint bays and within streetlight pillars.

The purpose of this Alert is to remind workers of the safety measures and controls for protection against hazardous voltages that may be present on these cable sheaths.

Dear ASP/1s and ASP/2s,

Following an incident while undertaking de-energised works to repair and replace damaged ducts in a low voltage (LV) pit on the corner of George Street and Margaret Street, one of our workers received an electric shock. Ausgrid placed a pause on all work in pits for seven days to review the circumstances of the incident.

Ausgrid requires that **prior to recommencing work on or near underground low voltage cables with conductive sheaths**, all ASPs confirm that:

1. the ASP is compliant with the requirements of their ASP authorisation with Ausgrid;
2. the ASP's safe system of work adequately addresses the hazards and risks outlined in this Safety Alert and incorporates the following mandatory requirements for all work performed in pits:
 - a. **Planned work must be coordinated with Ausgrid officer to gather information for network condition.**
 - b. **If no underground low voltage cables with conductive sheaths are identified as part of the GIS review, ASP staff must perform a visual assessment when on site to confirm this and proceed with standard controls.**
 - c. **If an underground low voltage cables with conductive sheath is found onsite, the following additional controls (in addition to those set out in the ASP's own safe system of work) must be implemented:**
 - i. **Site Entry**
 - LV insulating gloves and safety gum boots¹ must be worn before entry to the site (e.g. pit or joint bay) and before testing of the cables.
 - Minimum Safe Work Distances (**MSWD**) must be maintained until testing can be performed and test results verified by an Electrically Qualified Ausgrid officer (i.e. ASP Compliance officer or Ausgrid Representative).
 - Consider the environment and, if practical once tested and deemed safe, utilise temporary

insulation or screening to protect against cable movement or indirect contact. This must be discussed prior and recorded on the ASP's site documentation.

- When the cables identified are street lighting cables that are not energised at the time work is being carried out, then isolation must occur.
- If the site is obstructed by water or sediment, dewatering should not be carried out until a risk assessment has been completed and electrical and contamination issues identified and controlled.

ii. Visual Assessment

- Visually assess all cables for damage and compare the number of cables expected from the GIS diagram, Field book records, etc with the Ausgrid Officer.
- If hazards are identified, pause the work and discuss with Ausgrid Officer.
- The results of the visual inspection to be confirmed with the Ausgrid Officer.

iii. Test for stray voltages

- LV insulating gloves and safety gum boots¹ must be worn.
- Test equipment must be checked before and after use. An extension handle is to be used where practical to do so.
- The conductive sheaths of all underground low voltage cables must be tested on all sides of joints (as either side of the joint may not be bonded through).
- If testing or further visual inspection identifies damaged cables, stray voltages or other hazards, pause the work, make the area safe and discuss with Ausgrid Officer.
- The testing of underground low voltage cables with conductive sheaths must be observed by the Ausgrid Officer and recorded as either a voltage detected or not detected by the Ausgrid Officer.

Note 1: Where safety gum boots are required to be worn, they must comply with AS/NZS 2210, stamped with the symbol I (non-conductive) or ASTM F2413 marked with the symbol EH (Electrical Hazard Resistant).

3. the ASP has held a "Pause for Safety" with all authorised workers. This Pause for Safety must include discussion of this Safety Alert, re-familiarisation with the relevant safe systems of work, including any updates to that system following this Safety Alert.

Once these steps have been taken, please confirm this by completing the following page. To avoid any doubt, the following page is to be signed by a Director or Manager of the ASP company, and all authorised individuals working on or near the network.

Failure to comply with this notice may lead to the suspension of individuals authorisation to work on or near the network.

Completed forms must be emailed to Level1ASP@ausgrid.com.au or ASPLLevel2@ausgrid.com.au.

This Alert should also be read in conjunction with previously issued ASP Alert **SA07_19 Accessing Ausgrid Pits and/or Ducts**.

Electrical Safety & Authorisations

Ausgrid

Issued by: Electrical Safety & Authorisations
Date Issued: 12 September 2019
Alert Number: SA12_19

Sent to: Level1ASP@ausgrid.com.au; or
ASPLLevel2@ausgrid.com.au

ASP Acknowledgements

Company Representative

By signing the below, I confirm that:

1. the requirements of this Safety Alert and my company's authorisation with Ausgrid have been met;
2. as relevant, the company's safe systems of work have been revised and updated; and
3. the company has conducted a "Pause for Safety" and reflection with all of our authorised workers on the dangers of working around live electricity.

ASP Number & Name	ASP#: _____ ASP Name: _____
Director/Manager Name:	
Signature:	
Date:	

Authorised Workers

By signing the below, I confirm the following:

- I have reviewed this Safety Alert and re-familiarised myself with the company's safety management system for undertaking work on or near the network;
- I have re-familiarised myself and will comply with the relevant parts of Ausgrid's safety management system, Electrical Safety Rules and other relevant policies;
- I have participated in a "Pause for Safety" and reflection within our company on the dangers of working around LV cables with conductive sheaths.

Name	AUP/H#	Signature	Name	AUP/H#	Signature