

ASP Safety Alert Service & Installation Compliance

Alert Number: SA09_22

27 July 2022

Subject: Pause for Safety: Issues relating to the connection of installations to the LV network

Key Messages

- **There have been recent serious incidents relating to the incorrect connection of customer installations to our low voltage network**
- **An incorrectly connected installation can seriously injure or kill people**
- **All people performing work connecting installations to the low voltage network must comply with Network Standard NS282 – Service Testing**

Background

There have been recent incidents relating to the connection of customer installations to our low voltage network. This Pause for Safety is designed to provide information and awareness of the issues relating to the connection of installations to the network and discuss actions you can take to focus on/improve safety in your company.

An incorrectly, or inadequately connected installation can create a serious electrical hazard for people, including our customers.

As part of the multiple earthed neutral (MEN) system used in Australia, earthed appliances, customer meter boxes, and the water pipes within many customers installations, are connected to the neutral conductor. If there is an open circuit or high resistance connection in the neutral return path back to the source at the distribution substation, a hazardous voltage can exist on those earthed appliances, meter boxes, and water pipes. The neutral conductor is therefore crucial to the safety of our customers.

This Safety Alert is a reminder of the importance of complying with:

- Ausgrid's Network Standard NS282 - Service Testing

Key points to discuss with your workers

- An incorrectly or unsafely connected installation can potentially seriously injure or kill people!
- The neutral conductor is crucial to the safety of our customers!
- All workers must comply with Ausgrid's Network Standard NS282 – Service Testing when connecting or reconnecting any installation to the low voltage (LV) network. Network Standard NS282 requires the following tests to be completed and recorded for each installation:
 - Polarity
 - Phase to neutral voltage
 - Phase rotation (3 phase services)
 - Confirmation of installation earth
 - Neutral integrity (Fault loop impedance $<0.6\Omega$)
 - Neutral to independent earth voltage ($<6V$)
- ASPs must have suitable work practices and procedures in order to comply with Network Standard NS282. i.e. suitable Safe Work Method Statements.
- All test results required by Ausgrid's Network Standard NS282 must be recorded and retained.
- ASPs must include all required test results in the Notification of Service Work (NOSW) which is to be submitted within 2 working days of completion of work.

- We must get this right – every installation – every time.

Questions to prompt discussion

- Have the necessary tests been completed, and the results recorded every time you connect or reconnect an installation to Ausgrid's network?

Next steps

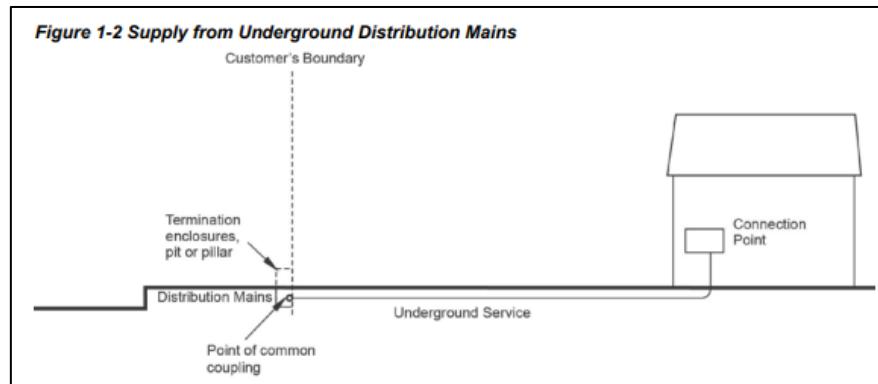
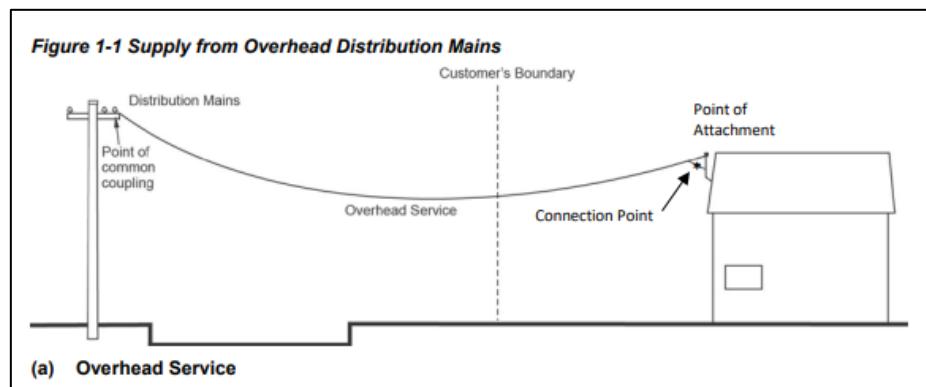
On the 28th of July, an e-learning presentation “Connection of Installations to the LV Network” will be added to the role of any ASP2 worker who undertakes Service Testing and Connection work. Whilst this is non-mandatory, Ausgrid strongly recommends ASPs complete the presentation.

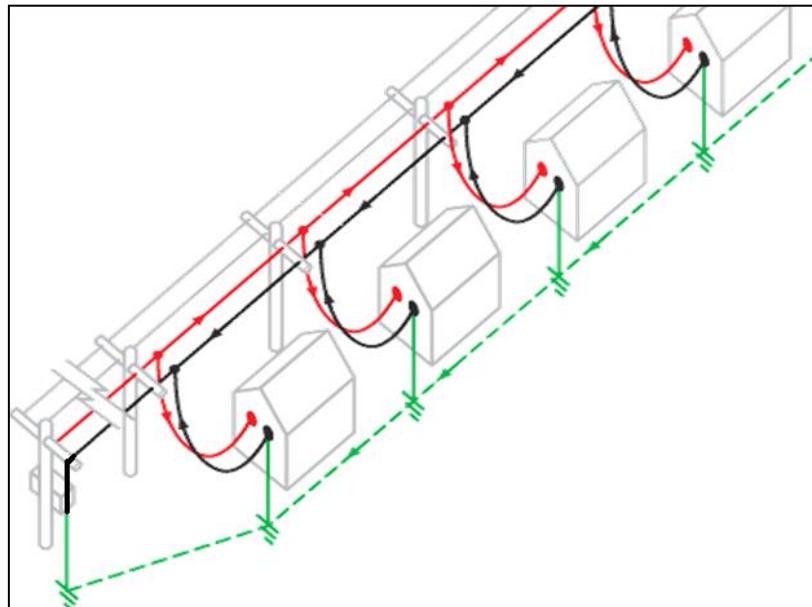
Ausgrid

Service & Installation Compliance

Additional Information

Connection of installations to the LV network





MEN System

The neutral conductor is crucial to the
safety of our customers!