

ASP Safety Alert

ASP Compliance and Practices



Alert Number: SA05_17

Subject: Pole failure after removal of overhead mains

5 July 2017

Prior to completing work on poles ensure the pole is inspected and tested as per Ausgrid's procedure outlined in NS146



Picture 1 showing pole had failed and was held

ASP1 work crews were replacing existing bare LV mains with twin 4 x 95 ABC to maintain safety distances to a new building under construction. The pole was an inline supporting pole with a pin construction. Once the bare mains had been removed, the workers heard a cracking noise and witnessed the pole head move. They immediately stopped work and positioned a Hiab crane to hold the pole and make the site safe.

There were no injuries or damage to property.

The pole was found to be rotted below ground level, the fracture point was measured at 700mm below ground level. The pole was replaced that afternoon.

The investigation found the workers **had not completed the necessary pole inspections and testing**, which included below ground level assessment, to ascertain the condition of the poles being worked on that day. Ausgrid's network standard NS146 *Inspection procedure for working on poles* outlines the following:

- Clause 7.2.1 Above ground line inspection requires workers to inspect for foundation failure which includes sounding the pole above ground with a metal ballpeen hammer, the ASP workers stated they completed this check as part of their risk assessment.
- Clause 7.2.3 work may proceed if the pole is Chromated Copper Arsenate (CCA) treated, less than 10 years old and passed the inspection requirements detailed above. The pole was not CCA treated and was nearly 50 years old.
- Clause 7.3.2 high stress work on poles includes removing overhead mains in any direction.
- Safety inspection procedure for work on wood poles – flow chart page 17 (see below and next page)
 - > pole didn't have slash, cross or termite disc
 - > pole was assessed to look and sound OK
 - > pole was not CCA and greater than 10 years old
 - > pole had high stress work completed
 - > **'progressively excavate, inspect, and sound with bar... to a depth of 350mm'**



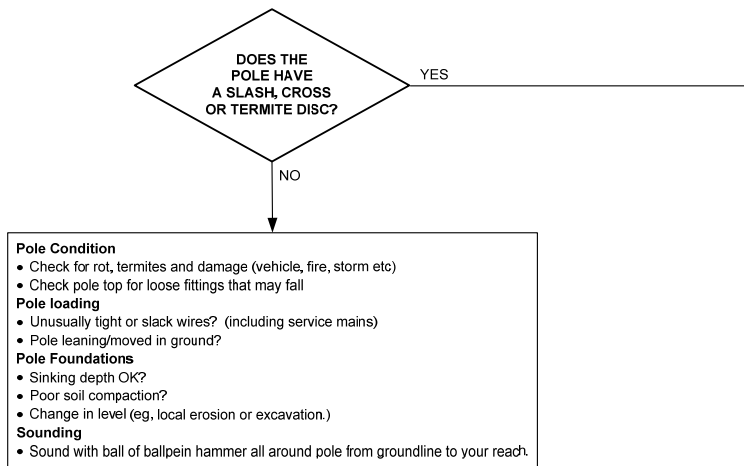
Picture 2 showing pole deteriorated condition

Ausgrid Project Officers

SAFETY INSPECTION PROCEDURE FOR WORK ON WOOD POLES

(For full details to Network Standard NUS 146
'Safety Inspection Procedure for Work on Poles',
Section 4 - Notes to Figure 1)
For concrete, steel, nailed, splinted or rebuffed poles refer to
the full Network Standard.

STEP 1 ABOVE GROUND INSPECTION AND SOUNDING



STEP 2 BELOW GROUND INSPECTION

STEP 3 BACK-FILL

REMEMBER:

- DO NOT disturb termites.
- DO NOT drill the pole.

- DO NOT climb and work on the pole unless it is securely held, eg by a borer/erector or crane.
- DO NOT work on the pole with an EWP or from an adjacent pole unless it is restrained, eg by a lashing.