

ASP Safety Alert Network Compliance & Authorisations

Alert Number: SA01_22

9 February 2022

Subject: Bimetallic PG Clamp Failures

Key messages

Multiple Failures of Bimetallic Parallel Groove (PG) clamps have occurred, causing outages, damage to the network and risk to the public.

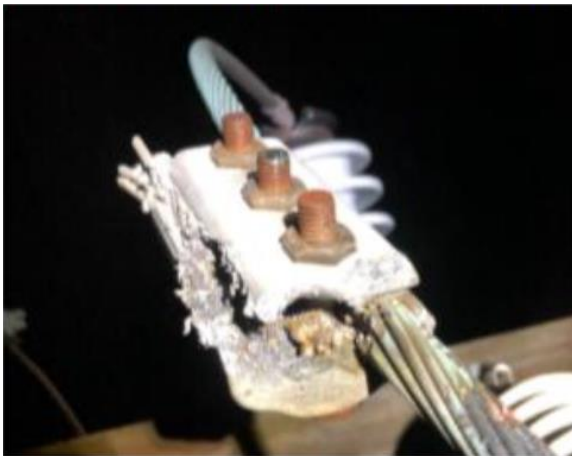
Bimetallic connections shall not be made to the section of mains under tension.

Any PG clamp failures identified on site are to be reported to the nominated Compliance Officer for the project or directly to Ausgrid via our emergency contact line – 13 13 88 immediately upon identification.

Dear ASPs,

There has been an increase in the number of PG Clamp failures on Ausgrid's network.

Bimetallic PG clamps (Aluminium and Copper) are of the greatest concern with failures occurring on both sides of the connector, and on connectors of different makes, models and dates of manufacture.



PG Clamp with aluminium section burnt away



PG Clamp with copper side melting

Extent of impact

PG clamps are widely used on Ausgrid's Sub transmission, 11kV and Low Voltage Networks throughout the entire distribution area. There are safety and reliability costs associated with these failures, with consequences including Live Mains on the ground, contact between High Voltage & Low Voltage mains and unplanned outages to our customers.

Immediate action to be taken

No Bimetallic connections are to be made on any sections of mains where the conductors are under tension.

Where a branch connection is required, the PG clamp shall always match the material of the through mains (mains under tension). This may require two connections in series to prevent the use of bimetallic connections in the mains under tension.

For connections within the bonded section:

1. A Compression sleeve is preferred if one is available to suit the conductors.
2. A bimetallic PG clamp may be used within the bond arrangement if there are no suitable compression sleeves available.

Please ensure this is communicated to your employees and sub-contractors who may be involved in this type of work.

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