Endeavour Energy

Technical Bulletin

TB 0371 – Failed NOJA Recloser Rectification

Date: 15/07/2025

Purpose

This technical bulletin has been issued to communicate the scope of rectification works associated with termination failures of NOJA reclosers models OSM 200 & OSM 300.

Background

Recent inspections of failed NOJA reclosers have identified a significant number of termination failures attributed to burnt bonds, where the conductor is secured within the tunnel connectors.

The following rectification should be attempted where the below failure modes/causes are identified:

- Connections are becoming loose in the tunnel, leading to hotspots on the terminals and potential subsequent bond failure.
- Accelerated corrosion and oxidisation due to dissimilar metal connection.

Figures 1 and 2 show examples of failures.

Figure 1 - Katoomba Rec 81048 (14yrs service) – 200 series

Figure 2 – Helensburgh Rec G0015 (7yrs service) – 300 series

Successful trials of the proposed rectifications have been conducted on failed units of both bodel types (OSM 200 and OSM 300). Videos and NOJA procedures for repairs/replacements can be found in *G:\EE Maintenance\NOJA Recloser Repairs*

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Actions

Refurbishment actions are expected to be undertaken with the unit in-situ (on the pole).

1. Remove the tunnel connector to expose the bare terminals.
2. Test the unit with bare terminals as follows:
    a. Contact resistance test results be less than 120μΩ.
    b. IR test results shall be greater than 1GΩ.

    If the unit fails either of these tests the entire unit will need to be replaced.

    Ensure that the associated WO standard job (<Group> field in SAP) is changed to reference '1LBSSW'.

3. Where the unit passes the respective tests: Palm connectors shall be fitted (using the respective palm kit – refer to Table 1 below) and the tests shall be repeated:
    a. Contact resistance test results shall less than 120μΩ.
    b. IR test results shall be greater than 1GΩ.

4. Incoming conductor shall be fitted with 180mm^2 bi-metallic cable lugs and bolted to the palm connectors.

5. Bird guards (refer to Table 1 below) shall be installed over the bare termination where CCT or HV ABC is used.

Table 1 Material Stock Code

Ref	Item Description	Material Master Code
399	GUARD,BIRD,NOJA 200/300/310 PALM CONS	1000010614
399	KIT,PALM CONN,RECLOSER,NOJA,200 SERIES	1000010618
399	KIT,PALM CONN,RECLOSER,NOJA,300/310 SER	1000010646

Additional information related to these failures and the changes that have been made to new reclosers can be found in Technical Bulletin 0369.

Implementation

The contents of this Technical Bulletin shall be implemented immediately.

Contacts

For further information contact: Asset Performance