Lucy AcuLok Fuse Cabinet – Type Defect

Further to “EXP-10-493 - Incomplete Isolation on Transformer Links of Lucy AcuLok LV Fuse Cabinet” issued 08/02/2021, following extensive testing and investigation the root cause has been identified and a type defect issued by the manufacturer for all affected AcuLok disconnector cassettes to be replaced using SWG-17-114. To preserve critical spares availability, initially, replacement will be limited to “jammed” cassettes detected during faults only.



Figure 1 – L2 handle tube in “O” position but green contact indicator still recessed and contacts retained CLOSED.

The type defect relates to the internal leaf springs of the disconnector cassette deforming to cause mis-alignment of the internal green sliding cartridge and thereby hindering or preventing release of the contacts from the CLOSED position. The mis-alignment causes the operation handle to become stiff or jammed such that continued excessive force applied to a “jammed” operation handle ultimately causes destruction of the internal components while the contacts are retained in the CLOSED position.

AcuLok units manufactured from late December 2014 have a different internal design that has been verified not to be applicable to the type defect. Hence the TLR shall be cleared for AcuLok units manufactured with the new design.

During faults the disconnector cassettes can be removed in accordance with SWG-17-114 to create a Point Of Isolation to facilitate interim restoration of customers. When a “jammed” cassette is encountered the cassette can only be extracted by using the manufacturer’s extraction tool. District faults teams have been provided with the extraction tool and limited spare cassettes.



Figure 2 – Internal green sliding cartridge, contact indicator protrudes outwards when opening.

Recommendations and action points

- The TLR shall be cleared for Lucy AcuLok units manufactured from late December 2014 commencing from serial number LVT0002225.
- During faults refer to SWG-17-114 for removal of disconnector cassettes if required to create a Point Of Isolation to restore customers in the interim.
- Manufacturer to provide spare disconnector cassettes on a rolling basis.
- Further investigation required to assess the likelihood of failure to operate condition and determine suitability of a live working procedure with minimal risk of customer interruption.
- District Licence Programmes to identify asset data gaps and update SAP accordingly. NP&R to identify all the remaining assets with the type defect and inform P&T and Control in order to update the TLR . Districts shall record and update NP&R with replaced units.