Network Rail Safety Bulletin

WT Henley Cap and Pin Insulator Failure (Triple Dish Replacement)

For the attention of OLE Maintenance Delivery Units, Overhead Condition Renewals Team, Construction and Design Contractors.

Background:

Following trippings on the North London Line, OLE staff found that a recently-installed WT Henley cap and pin type insulator had catastrophically failed due to flashover. Investigations have determined that the glass-fibre core of the insulator has failed due to torsional overload.

Subsequent enquiries have revealed that WT Henley insulators to PADS number 91/012574, Manufacturer Reference 56145-56 are not designed to withstand a high torsional load such as that imparted when turning the cap and pin end fittings under line tension, for example to re-orientate snap head pins.

Immediate Action Required by all persons affected:

1. WT Henley insulators to PADS number 91/012574, manufacturer reference 56145-56 must not be used in new installations for multiple tensioned conductors (e.g. contact & catenary tension combined), or where the conductor tension is greater than 11kN.

2. Where insulators of this type are already installed, a rig shall be installed across them to relieve line tension prior to performing any rotation of the “cap and pin”.

Teams are reminded to lightly grease the ball and socket when installing new insulators from ANY manufacturer to minimise the friction of the bearing surfaces.

This safety bulletin does not restrict the use of the Allied Insulators polymeric equivalent, PADS number 091/010050, manufacturer reference FA/S 4046A which can continue to be used as normal.

For further technical details and advice contact John Hayes, Senior Technology Engineer (john.hayes3@networkrail.co.uk – 07801 907 046)

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