



Network Rail
40 Melton Street
London NW1 2EE
Tel: +44 (0)20 7557 8000

Memorandum

To: Territory E&P Engineers, Area E&P Maintenance Engineers, MP&I, WCRM, Thameslink, Enhancement Engineering
From: Arif Arabaji
Title: E&P Engineer (Electrical Distribution)
Tel: 085 78978 (020 7557 8978)

cc: Kevin Lydford
Mark Inwood
Sarah Parr

Date: 11 September 2006

NR/BS/LI/056: Letter of Instruction

This is a Letter of Instruction. In accordance with Section 16, of Network Rail Business Process Document, NR/SP/STP/090 – *Managing Change to Network Rail Standards*, I give notice that the following changes shall be made with effect of **11 September 2006:**

Permali Bushings: Access Restrictions

Instruction

Work is not permitted on the exterior of switching station buildings, including the sides and the roof, where these are fitted with Permali bushings, unless all 25 kV supplies to the switching station, including the incoming feeder, have been isolated.

The reason for its issue

On Sunday 17 April 2005 a roof bushing at York feeder station exploded resulting in porcelain debris being ejected from the bushing into the surrounding area of the feeder station. Since then, an investigation was undertaken to discover the precise failure mechanism. This has now been identified as a failure of the sealing gaskets that allows water treeing to occur within the bushing, leading eventually to a short circuit and catastrophic failure.

Who it affects

All maintenance staff that need to carry out work on the exterior of switching station buildings fitted with Permali bushings.

Standards affected

None

Expiry date

This Letter of Instruction dated 11 September 2006 shall expire when a superseding Letter of Instruction is issued.

This instruction does not change any requirements for compliance with legislation, other standards or health and safety requirements.

Further advice and guidance on the application of these changes may be sought by contacting **Arif Arabaji on 085 78978 (020 7557 8978)**

Author:

Arif Arabaji

E&P Engineer (Electrical Distribution)

Endorsed by:



Kevin Lydford

Professional Head of Electrification and Plant Engineering