PANEL OF INQUIRY SAFETY HEALTH ENVIRONMENT DOCUMENTATION

TECHNICAL ScottishPower *Express*

Reference no.: EXP-11-249 Incident: Faulty 11kV OH Line Tension Insulator Date: 22/05/2019



Faulty 11kV OH Line Tension Insulator

During OH Line installation works on Thursday 16th May 2019 at Glencorse, Ae Village in Dumfries District, an 11kV tension pigtail insulator, supplied from Mosdorfer, failed on release of pull lift tension.

On inspection, it was found that the steel pigtail fitting of the insulator was not crimped. The insulation had held the insulator together in transit and storage, but failed when put under tension during installation. (See Figures 2 and 3).

A visual examination of insulators in Bonnybridge and Queensferry has been initiated and following this, a quantity of insulators have been deemed suitable for use. Further orders of Mosdorfer tension insulators have been stopped. Insulators which have not been inspected have been quarantined. An investigation with the supplier into the root cause of the failed insulator has been initiated. A sample of the batch will be submitted for testing.



Figure 1. Faulty pigtail OHL Insulator

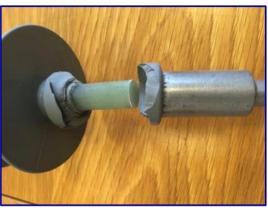


Figure 2. Separation of pigtail end fitting



Figure 3.
No Compression on
Mosdorfer Insulator



Figure 4.Correctly Compressed
Mosdorfer Insulator



Figure 5.
Correctly Compressed
Henley Insulator



Figure 6.

Manufacturer and batch code details

Note: Quality compressions are only lightly indented. The Henley insulator picture is shown for comparison purposes.

Recommendations and Action Points

- Prior to installation, all polymeric type tension insulators (all voltages) shall be visually checked to ensure that they have been crimped at both ends. See Figures 4 & 5.
- Visually inspect all insulators in local / van stock before use and quarantine any with Mosdorfer "11 2018" date code, as shown above. See Figure 6.
- Collate any quarantined insulators and contact Jamie McDonald to arrange inspection: (Jamie.Mcdonald@spenergynetworks.co.uk)