A.2.2 Laboratory Investigation of failure of medium voltage XLPE cable joints.

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ABSTRACT

Utilities are reporting failures of XLPE cables and their accessories (joints & terminations) in service due to various reasons like poor design, substandard materials, improper technique, improper handling, etc. During laboratory tests also few cases of failures have been experienced. Number of such failure cases have been systematically analysed and suitable recommendations made.

Experience indicates that majority of the failures of the cable system can be attributed to bad conductor connection provided in the cable joint. Significant number of failures have also been experienced due to entry of water into the cable system.

This paper discusses few cases of failure of medium voltage XLPE cable joints, analysis carried out and consequential measures to be adopted to minimise such failures for improved service reliability.