

Failure experience of Medium Voltage heat shrink accessories in Saudi Arabian transmission network

Abdullah A. ALDHUWAIAN (1)

1 Saudi Electricity Company, Buraydah, Qassim Area aadhwaian@se.com.sa

As the network of National Grid SA is enormously expanding, medium voltage power cables are extensively used. Knowing that medium voltage power cables are responsible for considerable amount of network interruptions, a special consideration was taken in order to improve their performance.

Joints and terminations which form a critical part of the cable system are known as the weakest link and susceptible to failure due to many considerations related to design, installation and operational parameters. It is very important for network owners to know the most threatening source of failures in order to decide the direction of improvement.

This paper shows field experience of National Grid SA with MV heat shrink cable accessories over five years and introduces a fault analysis method to improve their performance by learning from fault experience.

Key words

Fault Analysis, Cables Accessories, Heat Shrink, Medium Voltage