



**F.7. Essais de caractérisation des câbles MT à isolation PR**

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**F.7. Characterisation test on MV XLPE insulated cables**

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## ABSTRACTS

Water treeing is generally considered as one of the most important causes of breakdown in power cables with polymeric insulation.

Observing the facts that the medium voltage XLPE insulated cables have been manufactured and widely used in Indonesia, the extended future use of XLPE insulated cables, the life of underground cables, usually depends upon the operating state of its electrical insulation.

Diagnostic techniques which assess the present status and predict the remaining life of electrical power apparatus are of paramount importance because such measurements can help to reduce unscheduled outages, improve maintenance planning and increase system reliability.

The characterisation test results of water trees are very useful, among other things as an advice element to the cable users in Indonesia, as a quality control to obtain precisely information concerning the behavior of a new cable under service condition and as a general view of quality of cable circuits.

Therefore, it is necessary to take into account to carry out testing and investigating water treeing problem for minimizing underground cable failures in Indonesia.

This paper is written on behalf that many utilities were bombarded with high failure rates before the anticipated cable life has been realized, and the reason for the failures is water trees.