

IEEE Guide for Field Testing of Shielded Power Cable Systems Using Very Low Frequency (VLF) (less than 1 Hz)

IEEE Power and Energy Society

Sponsored by the
Insulated Conductors Committee

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Abstract: Very low frequency (VLF) withstand and other diagnostic tests and measurements that are performed using VLF energization in the field on shielded power cable systems are described in this guide. Whenever possible, cable systems are treated in a similar manner to individual cables. Tables are included as an aid to identifying the effectiveness of the VLF ac voltage test for various cable system insulation problems.

Keywords: cable fault locating, cable system testing, cable testing, condition assessment, dielectric spectroscopy, grounding, hipot testing, IEEE 400.2™, partial discharge testing, proof testing, safety, tangent delta testing, very low frequency testing, VLF ac voltage testing

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