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Bench testing of power cables and cable accessories in the high-voltage testing complex of JSC «NIIPT».

In the article the main results of bench testing of power cables for voltage 6–330 kV of various design (with impregnated paper insulation, oil-filled with paper-oil insulation of high and low pressure, with XLPE) cable and cable accessories that have been made in the high-voltage testing of complex of JSC «NIIPT» over the past 30 years are given.

According to the results of years of research and bench tests the mathematical models of insulation aging and methods bench endurance test power cables and cable accessories of various design have been developed or re-fined, effective methods of diagnostics of cable lines of various design under field conditions have been developed also.

According to the results of bench tests also confirmed operational reliability and conformity of power cables with XLPE insulation and cable accessories manufactured by different manufacturers, including foreign, domestic requirements and international standards.

Key words: bench testing, power cables, cable accessories, testing complex, aging, life test, methods, the dielectric loss tangent, insulation.

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