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SIMULATION OF ELECTROMAGNETIC FIELD IN RESIDENTIAL BUILDINGS LOCATED NEAR OVERHEAD LINES

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Abstract

This paper deals with the numerical simulation of power frequency electromagnetic field in the multi-storey building which is made of precast concrete and is located near the overhead line. The results of numerical simulations are confirmed experimentally. It is shown that the overhead line magnetic field penetrates inside the residential premises almost with no attenuation, because of poorly shielding by houses' structure. It is determined that the overhead line electric field is effectively shielded by houses' structure, so it almost doesn't penetrate into buildings. References 7, figures 3, table 1.

Key words: overhead line, magnetic field, electric field, shielding.

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