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ENVIRONMENTAL IMPACT ASSESSMENT OF SS 400/110 KV “SKOPJE 5”

ABSTRACT

The HV substations influence on the human inhabitant environment has lately been given the necessary attention. In R. Macedonia, the situation when high voltage 110 kV substations are found deeply into urban surroundings is ever more present as a result of the urban settings expansion, or because of the necessity to reduce the transmission losses. In this paper, the author's experiences related to the calculations of the electrical and magnetic fields in the surroundings of "Skopje 5" 400/110 kV substation are presented. The results of the calculations are shown in 2D and 3D, which gives an easy insight of the substation's influence. The increasing of the electrical field intensity is significant in the proximity of the substation, where, from technical reasons, two equivalent phases are placed parallel one next to the other.

Keywords: electrical field, magnetic field, substation, calculations.