An Evaluation Method to influence of Lightning Surge for Railway Telecommunication Systems

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At general buildings, common grounding, which equates the electric potential of the equipment, is one of the effective methods for protecting it from lightning surge. However, in railway telecommunication systems, the merit and the demerit of common grounding are not clarified, and calculation methods for evaluating the influence of lightning surge in railway telecommunication systems are not established. Therefore, the method for protecting the equipment from lightning surge by common grounding has not defined for railway telecommunication systems. In this paper, we propose an analysis model of lightning surge for railway telecommunication systems, and propose an evaluation method for estimating the influence of lightning surge on railway telecommunication systems by this analysis model.