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**DETERMINATION OF SEAT OF A SINGLE-PHASE CIRCUIT TO EARTH UNDER
CONDITIONS OF ELECTROMAGNETIC INFLUENCE ON THE AIR LINE OF SIGNALING,
CENTRALIZATION AND BLOCKING OF RAILWAYS**

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Abstract

The analysis of the influence factors on the accuracy of the location of the earth fault on an

overhead line with a distributed load The existence of an inverse dependence of the value of the first harmonic part in the voltage of the damaged phase from the distance to the closure is theoretically substantiated and experimentally confirmed. One of the main reasons for this is the distributed along the line load, which is connected to the line through single-phase transformers. Proposed measures to improve the quality of the electric energy of the line and the accuracy of the determination of the location of the closure. References 9, figures 5.

Key words: ground fault, higher harmonics, method, accuracy, experiment, modeling.

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