

only 0.13%, compared with 0.29% when used in use as a function of the sum of squared deviations. The coefficients of variation X_0 and B_0 have smaller values: 0.72% and 0.035%, respectively, versus 0.73% and 0.051%. In addition, when the sum of squares of deviations is used as an objective function, the estimated value of active conductivity has a negative sign, which contradicts the physical meaning of the problem being solved.

Optimization calculations showed that due to the optimal regulation of the flow power and voltages based on the estimated parameters of the transmission line, losses in it in one hour could be reduced by 2.5% from 12.35 thousand kWh to 12.03 thousand kWh while maintaining the initial voltage at the transmitting end of the line. In the presence of technical capabilities to reduce the voltage and at the transmitting end of the line, the relative decrease in the total losses of the transmission line can reach several tens of percent during inclement weather and increased corona losses.

Recommendations are given for improving the accuracy of identification of the parameters of transmission lines, which consist in taking into account the two-sided restrictions on the estimated parameters in the objective function in the form of penalties.

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