s 2018 0024

The invention relates to the power equipment diagnostics and can be used to detect deteriorations of the reinforcing bars of the reinforced concrete electric power transmission towers.

The method for detecting the deteriorations of the reinforcing bars of the reinforced concrete electric power transmission towers comprises placing with the possibility of moving along the reinforced concrete tower an inductance coil of a measuring oscillatory circuit, placing nearby the reinforced concrete tower an inductance coil of a compensating oscillatory circuit, connecting said circuits by means of resistors to a generator of sinusoidal oscillations with controllable frequency, measuring the parameters of amplitude-frequency characteristics of circuits, where the value of the resonance frequency of the measuring circuit is set 3..5% higher than that of the compensation circuit, measuring the difference in the voltage values on the measuring and compensation circuits with recording of the measurement results, measuring said parameters after a certain period of time, comparing the results of the obtained measurements with the initial ones, determining the occurrence of deteriorations of the reinforcing bars of the reinforced concrete electric power transmission towers by the difference between the values of the parameters, at the same time as the core of the inductance coil of the measuring circuit is used the reinforcement of the reinforced concrete tower, and as the core of the inductance coil of the compensation circuit are used the reinforcement simulators, made in the form of rings.

Claims: 1
Fig.: 4