Assessing Technical Condition of Power Equipment at Power Substations

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Abstract: The present paper is devoted to the issue of monitoring and technical diagnostics of 35–110 kV substations equipment. The primary task of this paper is to prove the possibility of using the system analysis data of technical diagnostics of equipment for integral assessment of substation equipment in case there is no possibility to establish a monitoring system for technical, economic or other reasons. As an example, the condition of equipment and technical data diagnostics of the real power centre consisting of 92 substations have been analyzed. The basic methods of data analysis for technical diagnostics equipment in substations have been described. The reasons and prerequisites for the use of methods of artificial neural networks to analyze the data of technical diagnostics have been identified.

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