

FORECASTING OF LOADING OF ELECTRICAL POWER SYSTEM

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Abstract

During the management of the electrical power systems the modes the row of important tasks decides, one of which there is short-term prognostication of loading of the electrical power systems with passing from one days to week.

Development of models of prognostication of loading of the electrical power systems is an intricate problem, because the change of loading has casual character, depends on duration of light part of twenty-four hours, from meteorological factors: the temperatures of air, cloudiness, strengths of wind, that determine seasonal vibrations and day's unevenness of the load-graphs.

On results the analysis of retrospective data - sentinel rows of the daily allowance load-graphs of the electric stations of EEC it was necessary to work out a model for short-term prognostication of power of loading of the electric stations of EEC taking into account meteorological factors with passing on twenty-four hours and to estimate exactness and reliability of results of prognosis.

In the manuscript of the article the model of prognostication is considered in that two is distinguished component loading: base and casual. These constituents, accordingly, take into account the a week's recurrence of loading, influence of duration of light part of twenty-four hours, and also meteorological factors (temperature of air and cloudiness). Detains for a model are day's graphic arts of loading of the electric stations of the electrical power systems and average value of temperature of air in a region.