

2.01. MEANS FOR FORECASTING FAILURES AND LIFE EXTENTION OF GENERATORS AND ELECTRIC MOTORS FOR OWN NEEDS OF TPP, HEPP, NPP

Software and methodical means are developed on the basis of integral vibration diagnostics and are intended for forecasting and prevention of failures of generators with large volumes of repair works and considerable expenses on them.



Diagnostics of generators is carried out on the basis of standard vibration detectors.

The technique is based on a defined criterion of limiting defect accumulation of generator stator and introduced diagnostic parameter K.

The criterion is general for electric cars.

In order to monitor in accordance with the developed criterion, a statistical database on vibrations is used with reference to the time of failures, modes, and repairs for 5-10 years.

Advantages:

- ease of use;
- possibility of identifying an appearance of dangerous defects and preventing failures of generators and electric motors for own needs for stator defects stator, which allows to almost completely eliminate emergency situations with large volumes of remedial works and reduce repair cost.
- ability to determine the terms and volumes of repair works.