

1.18. MONITORING SYSTEM OF THE CONDITION OF DISTRIBUTION CABLE NETWORKS OF 6-10 KV VOLTAGE BASED ON RETROSPECTIVE DATA

The system is designed to determine a present state of the cable network, identify hazardous areas and prevent possible emergencies.

Based on the data gathered from dispatching journals, passports on cable lines and other documents over the years of network operation, an electronic database of the present state of cable network insulation is created.

According to the algorithms developed at the Institute:

- an assessment of the network isolation state is conducted in the conditions of more complete statistical information;
- a probability-territorial map with the population on the most damaged territories is created;
- a monthly forecast of line damage for the next year is provided;
- the recommendations on improving network maintenance and extending a period of their trouble-free operation are given.

The system implementation allows (without any additional measuring devices) to have an up-to-date information on the present state of network, reduce a number of emergency situations on cable lines, increase reliability of their operation, and reduce the costs spent by enterprise on the damage identification and elimination.