

The proposed method for measuring and metering electric power in high-voltage three-phase electric network differs in that three electric meters are used, which are connected to the corresponding phase conductors of the network via current and voltage measuring transformers, and special facilities for reading the meter indications are used that are isolated from the meter electric circuits.

The proposed system for the realization of the method contains three identical measuring units. Each of the measuring units contains a single-phase electric meter, a current transformer connected to the current coil of the meter, a secondary power-supply unit, and additionally, a high-voltage capacitive voltage divider, a matching transformer, and a unit for reading the meter indications and transmitting measurement data, which is connected to the output of the meter and the input of the electric energy recording system via corresponding elements for isolating electric circuit. The voltage coil of the meter and the input terminals of the secondary power-supply unit are connected to the terminals of the voltage divider via the matching transformer.

The proposed method and system allow measurement accuracy to be increased and cost of equipment to be reduced, as well as provide protection of measurement data against unauthorized access.