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## INCREASE OF ENERGY EFFICIENCY AT AUTOMATION OF APK OBJECTS

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**Statement of the problem, an analysis of recent research and publications.** Increasing energy efficiency now, along with information and computerization, is one of the main directions of technical policy in all developed countries of the world. An essential component of this problem is the energy saving of electrical energy. Energy conservation is reduced to reducing unnecessary energy losses. Analysis of the structure of losses in the production of agro-industrial complex, distribution and consumption of electricity shows that the determining share of losses (up to 90%) falls on the sphere of energy consumption. The main consumer of electricity is the electric drive (more than 60%).

**Purpose of the study.** Increase of energy efficiency of APC facilities and reduction of energy losses.

**Basic materials research.** In the agro-industrial complex, about 90% of all electric drives are used in simple units - pumps, fans, conveyors, conveyors, etc. Until recently, little attention has been paid to this group, since in such aggregates the simplest electric drives with not always correctly selected engines are usually used, but in this group there is a basic reserve of energy and resource saving. This is mainly due to the objectively existing contradiction: the overwhelming majority of such electric drives are uncontrollable with a short-circuited rotor, and the technological processes serviced by them generally require the control of technological coordinates: speed, pressure, flow, temperature, etc. Therefore, control is performed energetically is inefficient and leads to large losses of energy, generates imperfection of the technological process itself.

Many experts believe that the economic potential of energy saving in the electric drive is almost exhausted, if we consider the individual components of the electric drive, then they are already quite perfect.

**Conclusion.** The radical method of energy saving in the electric drives of the agro-industrial complex is the transition from an unregulated electric drive to an adjustable one, that is, the supply to the operating element of a technological installation of that power is required at the moment.