Annotation

The thesis project is considering an automated electric drive of cable car, as well as solving the problem of its energy supply and infrastructure from the mini hydroelectric power plant in the area of Talgar - Issyk transition. The analysis of the hydropower potential of the area was conducted and hydro aggregate HA4 MNTO INSET was offered for mini-hydroelectric station.

Were implemented calculations of required power for drive of cable car and was proposed an asynchronous frequency-controlled electric drive with automatic speed control and torque, which allows saving a considerable share of the electricity consumed from the mini hydroelectric power plant. Research on virtual model in Simulink environment (Matlab 7.0.1) showed its performance and stability at high quality of transients.