

Peculiarities of frequency and power flow control in isolated power systems.

Ayuev B. I., Binko G. F., Gerasimov A. S., Gurikov O. V., Zhukov A. V., Milyaev R. G., Pavlushko S. A., Smirnov A. N.

The article describes the principles of organizing of an automatic system for frequency and power regulating in the UPS of Russia. Using the power system of the Kaliningrad region as an example, it is shown that in a small isolated power system, a special organization of the process of primary and secondary frequency regulation is required. The importance of automatic tertiary frequency control in small isolated power systems is noted. The principles of building a system of automatic tertiary frequency regulation developed for the power system of the Kaliningrad region are described.

Keywords: power unit model, combined-cycle plant, gas turbine unit, digital model, control system.