Selection of control actions based on the common starting elements of two adjacent SHC CECS complexes.

Chuvasheva N. N.

The creation of centralized complexes with a single logic of emergency management was an inevitable stage in the development of emergency automation in our country. They are important for the energy developmeny of our country. The centralized emergency control system (CECS) expands the range of permissible modes of operation of the power system, increases accuracy and reduces the redundancy of control actions (CA). The reliability and efficiency of the CECS has been proven by many years of successful operation. The algorithms of the CECS are still being improved. The development of CECS provides for the creation in the future of a coordinating emergency automation system (CEAS) of the UES of Russia, which is intended for the effective coordination of CECS of combined and regional energy systems.

This work examines the selection of control actions for common starting device using the example of two adjacent complexes of SHC (software hardware complex) CECS combined energy system (CES) North-West and CES Center. Technical solutions are proposed in terms of coordination of the selection of control actions for the common starting devices of CECS CES North-West and CES Center for all combinations of operating modes of the lower device of the substation 750 kV Leningradskaya and the lower device of the Kalininskaya NPP (nuclear power plant).

The developed solutions are an example of private interaction, therefore, they cannot be used to coordinate the selection of control devices for common starting elements in other operating areas, without taking into account all the features of the calculation models of the CECS of these operating areas.

Key words: emergency automation, starting device, control action, centralized emergency control system.