

Stability issues of the hydro-turbine governing systems using the example of domestic experience.

Gerasimov D. A., Gurikov O. V., Kabanov D. A., Smirnov A. N.

A review of sources that are devoted to the topic of hydro-turbine governing systems stability issues with examples of their incorrect operation has been carried out. Based on the review, examples of emergency events caused by incorrect operation of hydro-turbine governing systems in the power system of Russia are presented. For these examples, the causes for the incorrect operation of the hydro-turbine governing systems, as well as the measures taken to prevent the recurrence of similar emergency events are given. General conclusions based on the materials of the review of domestic and foreign experience are drawn.

Key words: frequency, speed controller, frequency controller, primary frequency control, oscillatory stability.