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ANALYSIS OF THE FREQUENCY CHANGE IN IPS OF UKRAINE IN CASE OF THE GENERATING UNIT DISCONNECTION OF THE NUCLEAR POWER PLANT

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Abstract

The current state of the primary and automatic secondary frequency control in the interconnected power system (IPS) of Ukraine has been considered. A quality analysis of the load-frequency control in IPS of Ukraine has been performed in the event of a disconnection of 1,000 MW generating unit at the nuclear power plant. The stiffness coefficients of IPS of Ukraine, the unified power system (UPS) of Russia in case of their joint operation have been

determined and an estimation of the load-frequency control in IPS of Ukraine by using "trumpet curves" has been performed as well. It is established that despite the unimproved organization of the load-frequency control in such conditions, the frequency control is maintained in IPS of Ukraine. References 6, figures 5.

Key words: frequency, active power, interconnected power system of Ukraine, automatic generation control, primary and secondary frequency control, imbalance.

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