An analysis of the perspectives for the development of UPS of Central Asia taking into account the integration of RES.

Shamsiev B., Shamsiev Kh.

A brief information is given regarding the major system outage that occurred in the United Power System of Central Asia (UPS CA) on the 25th of January 2022 with the complete blackout of the power systems of Uzbekistan, Kyrgyzstan and part of the power systems of South Kazakhstan. Measures to prevent the recurrence of such accidents in the future are considered. Based on an analysis of the perspectives for the development of UPS CA, taking into account the expected large-scale integration of RES in the region, it is proposed to switch from the current parallel operation to joint operation of UPS CA with the Unified Power Systems of Kazakhstan and Unified Power System of Russia through a DC back-to-back station.

Key words: outage, UPS of Central Asia, back-to-back station, integration of RES, stability, reliability.