

19 July 2023

## East IDO performed successful in situ tests with partial isolation of the Power System of the Republic of Sakha (Yakutia) from the East IPS

The East Interregional Dispatch Office (East IDO) performed successful in situ tests with the partial separation of the Power System of the Republic of Sakha (Yakutia) for isolated operation from the East Interconnected Power System (IPS). The tests were carried out in order to analyze and confirm the accuracy of settings and algorithms of the power controller performance of the Vilyuyskiye Hydro Cascade.

The tests – as one of the implemented measures after the accident in the Yakutsk Power System in March, 2023 – were carried out in order to exclude synchronous frequency and power swings in the isolated load district. On March 4, following an emergency tripping of a transmission line, the Western, Central, and part of the Southern Yakutsk load districts of the Yakutsk Power System were separated from the East IPS.

In preparation for the tests, SO UPS, East IDO and Vilyuyskiye HPP 1,2 tested the generators' readiness to participate in primary regulation using ALFC (settings) to ensure load districts' secure operation with the East IPS in synchronous and isolated modes. Upon successful completion, the *in situ* tests of ALFC new settings took place and included partial isolation of the Yakutsk Power System. The tests were carried out under the conditions of forced mode operation in the controlled sections in order to match those during the incident, and the results showed the absence of frequency and power fluctuations and confirmed the accuracy of particular settings.

ENDS.