



АКЦИОНЕРНОЕ ОБЩЕСТВО

«СИСТЕМНЫЙ ОПЕРАТОР
ЕДИНОЙ ЭНЕРГЕТИЧЕСКОЙ СИСТЕМЫ»

30 November 2022

Synchronous operation of Siberia IPS and East IPS has begun

SO UPS together with Russian Railways' subsidiary Transenergo and ROSSETI have successfully completed the part-load transfer from Siberia Interconnected Power System (IPS) to East IPS without interruption of supply. This has become possible due to the grid breaking point shift during the short term synchronous operation of these IPSs.

The shift of the grid breaking point has secured power supply for consumers in Yakutia and west part of Amur Region during demand growth caused by temperatures fall down. At the same time, the synchronous operation helped to avoid stopping railway traffic along the Trans-Siberian Railway. Previously, in such cases, the shift required railway traffic interruption, the suspension of supply to Russian Railways facilities and other consumers for up to one-hour period.

The interconnection between Chita and Skovorodino 220 kV, which supplies power to Trans-Baikal Railway traction substations, is the only connection between Siberia IPS and East IPS. Its capacity is insufficient to ensure long-term reliable synchronous operation of two IPSs, so it is constantly open with grid breaking point at one of the substations. The shift approach with short-term switching to the synchronous operation of both IPSs has been successfully applied during full-scale tests.

Currently the possibility of Siberia IPS and East IPS constant synchronous operation is under discussion. This could help to cover the increasing demand in this part of the Russian UPS, that is caused by Far East economic development and growth of railway traffic. Commissioning of additional 220 kV transmission lines along Baikal-Amur Mainline and Trans-Siberian Railway is considered as a possible solution.

ENDS.