Global trends in the development of DC power transmission technologies and power electronics for power systems (the review of 47th CIGRE session papers). Suslova O. V., Travin L. V.

Review of papers made by Study Committee B4 «DC systems and power electronics» during 47CIGRÉ Session 2018 is given. Key topics of discussions were: HVDC grids: design, control, protection, problems of the joint operation of the converters supplied by various manufacturers; integration of offshore wind farms using HVDC grids; hybrid power transmissions containing current converters and voltage converters; low-voltage DC grids; new power semiconductor devices with improved performance.

Keywords: modular multilevel converter, wind power plant, HV and LV DC grids, hydride HVDC power transmission, interoperability.