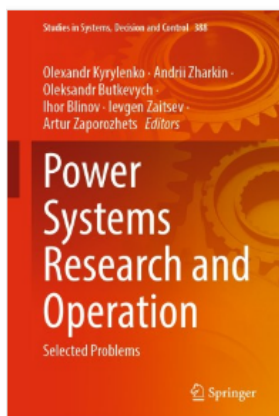


Was published a collective monograph «Kyrylenko, O., Zharkin, A., Butkevych, O., Blinov, I., Zaitsev, I., Zaporozhets, A. (2021) Power Systems Research and Operation: Selected Problems. doi: <https://doi.org/10.1007/978-3-030-82926-1>», by publishing house Springer Nature Switzerland AG.

SPRINGER NATURE



Power Systems Research and Operation

Selected Problems

Editors

Olexandr Kyrylenko, Andrii Zharkin, Oleksandr Butkevych, Ihor Blinov, Ievgen Zaitsev, Artur Zaporozhets

Obtains current scientific and practical problems that occur during the operation of integrated power system

Presents study of the stability of a power system by frequency

Includes research methods for the identification of dominant modes of low-frequency electromechanical oscillations

The authors and co-authors of all sections are scientists from the Institute of Electrodynamics and leading scientists from other academic institutions and higher educational institutions of Ukraine in the field of solving energy problems of Ukraine.

The book examines the problems in the field of power systems in fields related to optimization of operating modes of electric power facilities and their control systems, information and measuring systems and metrological support in the electric power industry, ensuring the functioning of the electric power system in the conditions of a competitive market of the electric power. Monograph is devoted to modern problems ensuring operational reliability and safety of objects integrated power system of Ukraine it's complex task. Solution of which is related to optimization of operating modes of electric power facilities and their control systems, creating diagnostic systems for the electric power industry, ensuring the functioning of the electric power system in the conditions of a competitive market of the electric power. The presented research results in monograph allow increasing the reliability and efficiency of operation of energy facilities and ensuring the stability of power systems, the introduction of effective methods and tools for forecasting electricity supply, optimize power systems, suggest road map to integrate electricity markets taking into account network constraints in modern conditions of electricity markets. The book includes 8 chapters. This book is for researchers, engineers, as well as lecturers and postgraduates of higher education institutions dealing with problems of operation, control, diagnosis and monitoring of integrated power system, power equipment and other.