

General Power Engineering. T.M. Bazyuk, I.V. Blinov, O.F. Butkevych, I.S. Goncharenko, S.P. Denysyuk, V.Y. Zhujkov, O.V. Kyrylenko, L.M. Lukyanenko, D.A. Mykolaets, K.S. Osypenko, V.V. Pavlovskyi, O.B. Rybina, A.O. Stelyuk, S.E. Tankevych, I.V. Trach (Edited by O.V. Kyrylenko) "Intelligent electrical networks: elements and modes". Institute of Electrodynamics of NAS of Ukraine. – Kyiv, Institute of Electrodynamics. 2015. – 399 p. 300 copies. ISBN 978-966-02-7913-1

The monograph focuses on the creation of intelligent electrical networks (IEN) based on a new concept of Smart Grid – a technology of electrical network (EN) management, taking into account the operation of electricity markets and the use of renewable energy sources (RES). An interpretation of the EN intellectualization is given as a new stage in the development of the Smart Grid concept with regards to electric power systems and EN in particular. An

approach on the use of simplified models of elements of dispersed systems is presented, which makes it possible to analyze the stability of complex systems that contain both local feedback connections on the power of individual sources, and general connections on the supply voltage.

The monograph is intended for specialists engaged in research in the field of intelligent electrical power networks and systems, as well as for postgraduate students and students of electrical specialties.