METADATA

Title: Modern Electricity Transmission and Distribution Systems

Other Titles: -

Language: Greek

ISBN: 978-960-603-038-3

Subject: ENGINEERING AND TECHNOLOGY

Keywords: Electric power transmission systems / Flexible Ac transmission systems (FACTS) / High voltage direct current (HVDC) transmission / Electric power distribution systems / Distribution systems with dispersed generation

Bibliographic Reference: Georgilakis, P. (2015). Modern Electricity Transmission and Distribution Systems [Undergraduate textbook]. Kallipos, Open Academic Editions. http://dx.doi.org/10.57713/kallipos-808

Abstract

This book is intended for undergraduate and graduate students studying electrical power transmission and distribution systems, and for professional engineers involved in the study, design, analysis, operation, and supply of these systems. In addition to traditional systems, it also presents modern electrical power transmission and distribution systems, such as flexible transmission systems and distribution systems with distributed generation. The basic philosophy of the book is that we learn through practice. For this reason, the book includes many solved examples, which help in understanding the methods of analysis of electrical power transmission and distribution systems. The book can be used by both novice and advanced scientists in the field. Teachers, students, and professionals in the field of electrical power transmission and distribution systems will find in this book the necessary material to understand concepts related to: - Traditional and modern electrical power transmission and distribution systems. - Electrical characteristics of transmission lines. - Electrical models of transmission lines. - Flexible transmission systems. - Direct current transmission. - Distribution system loads. - Distribution system analysis. - Distribution systems with distributed generation. - Optimal operation and development of electricity transmission and distribution systems.

The Project is funded by the National Development Programme 2021-2025 of the Ministry of Education and Religious Affairs and implemented by the Special Account for Research Funds of the National Technical University of Athens and the Hellenic Academic Libraries Link.