

| | |
|-------------------------|--|
| 1. Record Nr. | UNINA9911006879803321 |
| Autore | Watson N. R |
| Titolo | Power systems electromagnetic transients simulation / / Neville Watson and Jos Arrillaga |
| Pubbl/distr/stampa | London, : Institution of Electrical Engineers, 2003 |
| ISBN | 1-62870-429-2 1-281-97114-6 9786611971144 0-86341-983-6 |
| Descrizione fisica | 1 online resource (449 p.) |
| Collana | IEE power and energy series ; ; 39 |
| Altri autori (Persone) | ArrillagaJ |
| Disciplina | 621.31921 |
| Soggetti | Electric power systems Transients (Electricity) |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Contents; List of figures; List of tables; Preface; Acronyms and constants; 1 Definitions, objectives and background; 2 Analysis of continuous and discrete systems; 3 State variable analysis; 4 Numerical integrator substitution; 5 The root-matching method; 6 Transmission lines and cables; 7 Transformers and rotating plant; 8 Control and protection; 9 Power electronic systems; 10 Frequency dependent network equivalents; 11 Steady state applications; 12 Mixed time-frame simulation; 13 Transient simulation in real time; A Structure of the PSCAD/EMTDC program; B System identification techniques C Numerical integration D Test systems data; E Developing difference equations; F MATLAB code examples; G FORTRAN code for state variable analysis; H FORTRAN code for EMT simulation; Index |
| Sommario/riassunto | Accurate knowledge of electromagnetic power system transients is crucial to the operation of an economic, efficient and environmentally friendly power systems network without compromising on the reliability and quality of Electrical Power Supply. Electromagnetic transients simulation (EMTS) has become a universal tool for the analysis of power system electromagnetic transients in the range of nanoseconds to seconds. This book provides a thorough review of EMTS and many |

simple examples are included to clarify difficult concepts. This book
will be of particular value to advanced engineering stud
