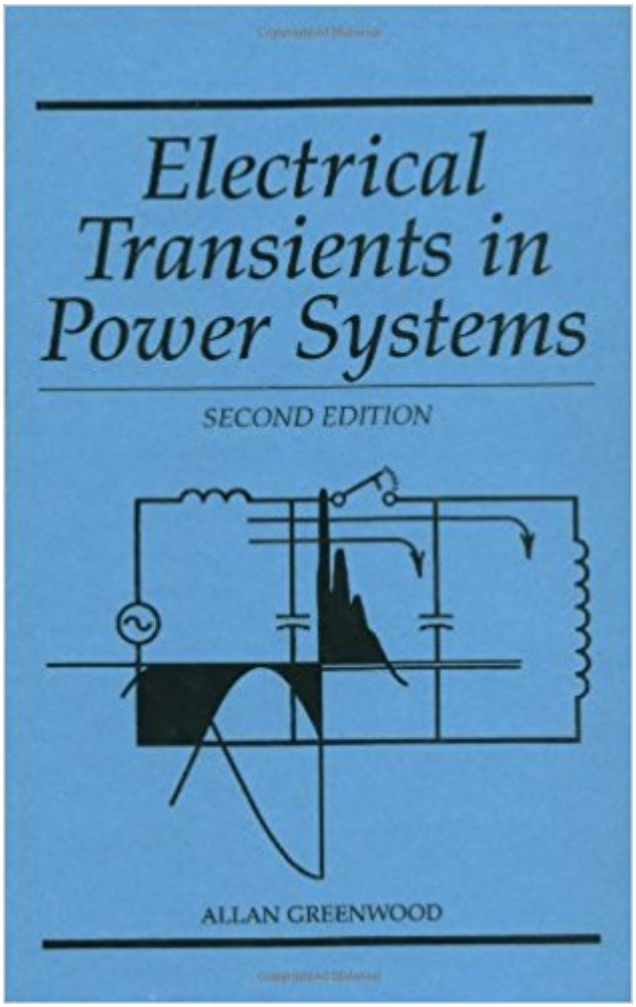
Electrical Transients In Power Systems



Synopsis

The principles of the First Edition--to teach students and engineers the fundamentals of electrical transients and equip them with the skills to recognize and solve transient problems in power networks and components--also guide this Second Edition. While the text continues to stress the physical aspects of the phenomena involved in these problems, it also broadens and updates the computational treatment of transients. Necessarily, two new chapters address the subject of modeling and models for most types of equipment are discussed. The adequacy of the models, their validation and the relationship between model and the physical entity it represents are also examined. There are now chapters devoted entirely to isolation coordination and protection, reflecting the revolution that metal oxide surge arresters have caused in the power industry. Features additional and more complete illustrative material--figures, diagrams and worked examples. An entirely new chapter of case studies demonstrates modeling and computational techniques as they have been applied by engineers to specific problems.

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Customer Reviews

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The book is magnificent and so beautifully written. It is NOT for beginners in any case. Greenwood sometimes omits some details and you will spend a great of time understanding all the concepts in the book. This is a must have for power engineers.

Great!!! It is a second edition book. I was expecting a first edition book.

This book presents the complex subject of power system transients in a clear and easy to follow manor with a lot of examples. It’s a bummer that this book is so expensive, but it is indeed worth the price (How much is having an understanding of exactly what is going on during non-steady-state conditions worth to you?). These concepts can also be applied to the analysis of other circuits (i.e. switching transients in power electronics circuits).

Good contents, but graphics are a little bit fade.

Thank you

This book is a "must have" for anyone who is studying Electrical Transients. Easy to follow. Definitely worth the price.

I teach the subject to graduate students. Greenwood has succeeded in simplifying the concepts of a very difficult subject tremendously. Whether it’s the electromagnetics background, the knowledge of complex differential equations, frequency dependency of parameters, the probabilistic nature of insulation coordination and much more, Greenwood takes you through a fascinating and exciting journey. He navigates the topics with ease, enriching his narration with examples and references. I

never enjoyed an academic book more.

This is an excellent book that covers a lot of ground. It also a lot of challenging problems that really test your understanding of the material. The material is fun to learn, as Greenwood tries to convey the physical phenomema at work behind the mathematics. He tries to give the student an intuitive feel for what's going on. It also covers fun topics such as lighting, as well as modeling of various parasitic parameters in a power system. An excellent reference book to have on your shelf.