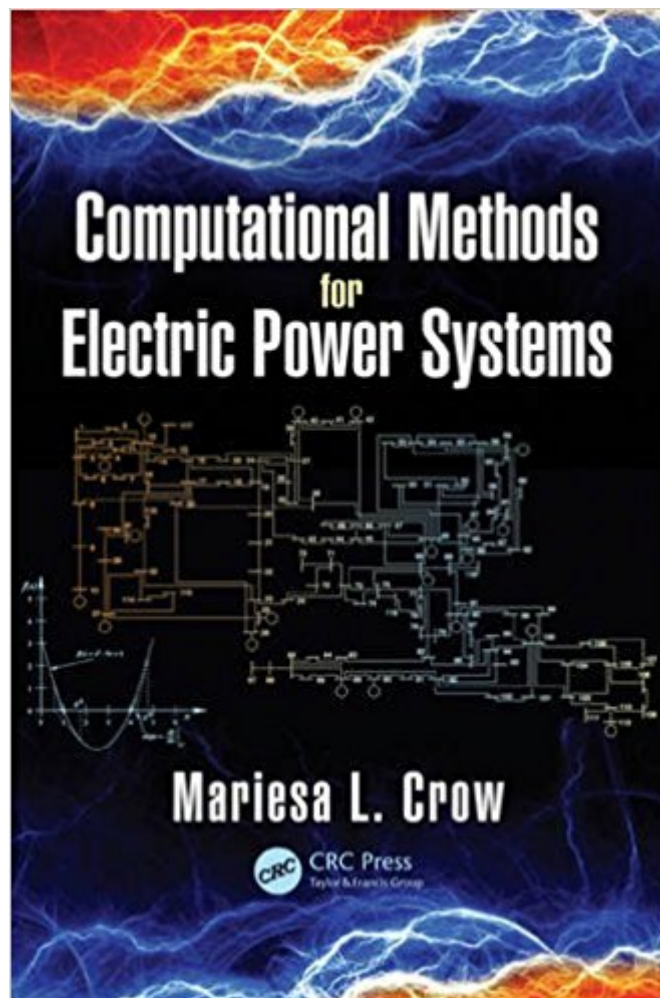




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Computational Methods For Electric Power Systems, Third Edition (Electric Power Engineering Series)



Synopsis

Computational Methods for Electric Power Systems introduces computational methods that form the basis of many analytical studies in power systems. The book provides the background for a number of widely used algorithms that underlie several commercial software packages, linking concepts to power system applications. By understanding the theory behind many of the algorithms, the reader can make better use of the software and make more informed decisions (e.g., choice of integration method and step size in simulation packages). This Third Edition contains new material on preconditioners for linear iterative methods, Broyden's method, and Jacobian-free Newton-Krylov methods. It includes additional problems and examples, as well as updated examples on sparse lower-upper (LU) factorization. It also adds coverage of the eigensystem realization algorithm and the double-shift method for computing complex eigenvalues.

Book Information

Series: Electric Power Engineering Series

Hardcover: 345 pages

Publisher: CRC Press; 3 edition (November 18, 2015)

Language: English

ISBN-10: 1498711596

ISBN-13: 978-1498711593

Product Dimensions: 0.8 x 6.5 x 9.5 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

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