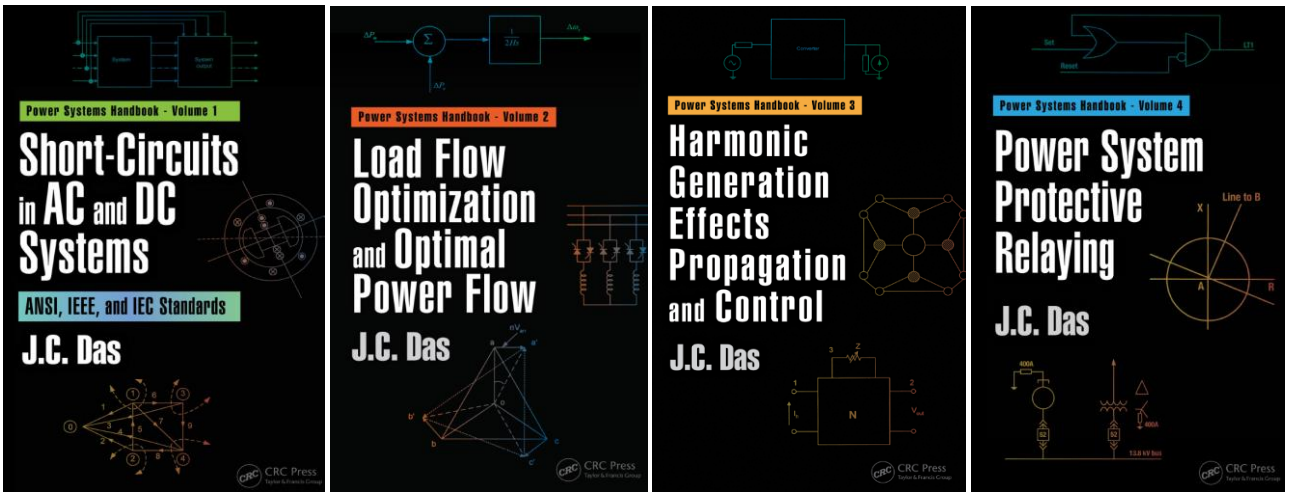

This is an excellent and comprehensive handbook regarding four important topics in electrical power engineering: short-circuits in AC and DC power systems (according to ANSI, IEEE and IEC Standards), load flow and optimal power flow, the problem of harmonics (sources, effects propagation and control) and, finally, protective relaying (from basics to recent technological developments – the microprocessor-based multifunction relays. The aim of this four volumes series is to provide a practical approach to a large scale of problems that an application engineer or consultant may be faced in performing system studies. They offer a solid theoretical and practical basis to understand the the whole actual computer aided power system analysis, from data and software tools, to results interpretation. Each part proposes a lot of problem to the reader, with the solutions provided in Appendix.

According with our field of interest, the 2nd volume is very interesting. The major aspects of the load flow and of the optimal power flow are presented, in conjunction with deregulated environment and free energy market, security assessments, load estimation and forecasting, uncertainty, HVDC transmission lines, FACTS devices, specific aspect for distribution networks. For solving the OPF, the classical nonlinear optimization approach is followed by the use of the modern heuristic and evolutionary programming based optimization techniques. Many case studies and practical examples are included.

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