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Subject: new Book review
Title: “Electric Energy: an introduction”
Author: M.A. El-Sharkawi
Publisher: CRC Press, Boca Raton, Florida, 2005, 455pp

This is a special wide spectrum textbook to be used as a primary course on Electric Energy in most(or all) Universities which have an engineering school. It is designed to replace the electromechanical energy conversion undergraduate course, thought, in general only to electrical engineering students.

It is special two folds: electric energy intelligent production and use is the key to prosperity in equilibrium with the environment, and because the book touches many fields of electrical and mechanical engineering.

We feel that all engineering students should take such a course in their undergraduate core curriculum.

Being designed for students the book is rather self-sufficient (which perhaps explains the lack of literature citations), with most new knowledge illustrated by numerical examples, photos and proposed exercises in each chapter.

The book is structured into 13 chapters that deal with:

- History and future of power systems(Chapter 1)
- Basic components of power systems(Chapter 2)
- Energy resources(Chapter 3)
- Power plants(Chapter 4)
- Environmental impact of power plants(Chapter 5)
- Renewable energy(Chapter 6)
- Alternating current circuits(Chapter 7)
- Electric Safety(Chapter 8)
- Three phase systems(Chapter 9)
- Power electronics(Chapter 10)
- Transformers(Chapter 11)
- Electric machines(Chapter 12)
- Power distribution and blackouts(Chapter 13)

The author is very experienced in the field and thus the treatment of such a broad spectrum of knowledge is handled with utmost clarity and kept to size by balanced decisions.

As electric energy is key to prosperity, its introduction to all engineering students is mostly welcome and I warmly recommend this textbook to Universities worldwide.

Sincerely, I. Boldea