



# Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing

By Mohammad Shahidehpour, Yaoyu Wang

Download now

Read Online ➔

## Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang

The first extensive reference on these important techniques

The restructuring of the electric utility industry has created the need for a mechanism that can effectively coordinate the various entities in a power market, enabling them to communicate efficiently and perform at an optimal level.

*Communication and Control in Electric Power Systems*, the first resource to address its subject in an extended format, introduces parallel and distributed processing techniques as a compelling solution to this critical problem.

Drawing on their years of experience in the industry, Mohammad Shahidehpour and Yaoyu Wang deliver comprehensive coverage of parallel and distributed processing techniques with a focus on power system optimization, control, and communication. The authors begin with theoretical background and an overview of the increasingly deregulated power market, then move quickly into the practical applications and implementations of these pivotal techniques.

Chapters include:

- Integrated Control Center Information
- Parallel and Distributed Computation of Power Systems
- Common Information Model and Middleware for Integration
- Online Distributed Security Assessment and Control
- Integration, Control, and Operation of Distributed Generation
- Agent Theory and Power Systems Management
- e-Commerce of Electricity

A ready resource for both students and practitioners, *Communication and Control in Electric Power Systems* proves an ideal textbook for first-year graduate students in power engineering with an interest in computer communication systems and control center design. Designers, operators, planners, and researchers will likewise appreciate its unique contribution to the professional literature.

 [\*\*Download\*\* Communication and Control in Electric Power System ...pdf](#)

 [\*\*Read Online\*\* Communication and Control in Electric Power Syst ...pdf](#)

# Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing

By Mohammad Shahidehpour, Yaoyu Wang

## Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang

The first extensive reference on these important techniques

The restructuring of the electric utility industry has created the need for a mechanism that can effectively coordinate the various entities in a power market, enabling them to communicate efficiently and perform at an optimal level. *Communication and Control in Electric Power Systems*, the first resource to address its subject in an extended format, introduces parallel and distributed processing techniques as a compelling solution to this critical problem.

Drawing on their years of experience in the industry, Mohammad Shahidehpour and Yaoyu Wang deliver comprehensive coverage of parallel and distributed processing techniques with a focus on power system optimization, control, and communication. The authors begin with theoretical background and an overview of the increasingly deregulated power market, then move quickly into the practical applications and implementations of these pivotal techniques.

Chapters include:

- Integrated Control Center Information
- Parallel and Distributed Computation of Power Systems
- Common Information Model and Middleware for Integration
- Online Distributed Security Assessment and Control
- Integration, Control, and Operation of Distributed Generation
- Agent Theory and Power Systems Management
- e-Commerce of Electricity

A ready resource for both students and practitioners, *Communication and Control in Electric Power Systems* proves an ideal textbook for first-year graduate students in power engineering with an interest in computer communication systems and control center design. Designers, operators, planners, and researchers will likewise appreciate its unique contribution to the professional literature.

## Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang Bibliography

- Sales Rank: #5091737 in Books
- Published on: 2003-06-19
- Original language: English
- Number of items: 1
- Dimensions: 9.60" h x 1.24" w x 6.30" l, 1.99 pounds
- Binding: Hardcover
- 534 pages

 [\*\*Download\*\* Communication and Control in Electric Power System ...pdf](#)

 [\*\*Read Online\*\* Communication and Control in Electric Power Syst ...pdf](#)

**Download and Read Free Online Communication and Control in Electric Power Systems:  
Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang**

---

## **Editorial Review**

From the Back Cover

The first extensive reference on these important techniques

The restructuring of the electric utility industry has created the need for a mechanism that can effectively coordinate the various entities in a power market, enabling them to communicate efficiently and perform at an optimal level. *Communication and Control in Electric Power Systems*, the first resource to address its subject in an extended format, introduces parallel and distributed processing techniques as a compelling solution to this critical problem.

Drawing on their years of experience in the industry, Mohammad Shahidehpour and Yaoyu Wang deliver comprehensive coverage of parallel and distributed processing techniques with a focus on power system optimization, control, and communication. The authors begin with theoretical background and an overview of the increasingly deregulated power market, then move quickly into the practical applications and implementations of these pivotal techniques.

Chapters include:

Integrated Control Center Information

Parallel and Distributed Computation of Power Systems

Common Information Model and Middleware for Integration

Online Distributed Security Assessment and Control

Integration, Control, and Operation of Distributed Generation

Agent Theory and Power Systems Management

e-Commerce of Electricity

A ready resource for both students and practitioners, *Communication and Control in Electric Power Systems* proves an ideal textbook for first-year graduate students in power engineering with an interest in computer communication systems and control center design. Designers, operators, planners, and researchers will likewise appreciate its unique contribution to the professional literature.

About the Author

MOHAMMAD SHAHIDEHPOUR, PhD, is a professor in the Electrical and Computer Engineering Department and Director of the Electric Power and Power Electronics Center at the Illinois Institute of Technology, where he has served in various administrative positions, including Dean of the Graduate College and Associate Vice President for research. He has over twenty years of experience as a consultant to the electric power industry. He is the author of more than 250 technical papers as well as three books on power system optimization and energy scheduling. Dr. Shahidehpour is a Fellow of IEEE.

YAOYU WANG, PhD, is a senior research scientist in the Electric Power and Power Electronics Center at the Illinois Institute of Technology. He has twelve years of industrial and academic experience in power

systems computation, optimization, and control; power market analysis; and EMS/DMS applications, development, and integration. He was a recipient of a research fellowship from the Japan Society for the Promotion of Science, and was a guest research scientist of Germany's Alexander von Humboldt Foundation. Dr. Wang is a Senior Member of IEEE.

## **Users Review**

### **From reader reviews:**

#### **Carissa Taylor:**

Nowadays reading books be than want or need but also be a life style. This reading routine give you lot of advantages. The advantages you got of course the knowledge your information inside the book this improve your knowledge and information. The info you get based on what kind of reserve you read, if you want send more knowledge just go with education books but if you want experience happy read one together with theme for entertaining for example comic or novel. Often the Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing is kind of e-book which is giving the reader unstable experience.

#### **Judy Turner:**

Your reading sixth sense will not betray a person, why because this Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing guide written by well-known writer who really knows well how to make book that may be understand by anyone who have read the book. Written in good manner for you, dripping every ideas and composing skill only for eliminate your current hunger then you still question Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing as good book not merely by the cover but also from the content. This is one book that can break don't determine book by its include, so do you still needing a different sixth sense to pick that!? Oh come on your reading sixth sense already alerted you so why you have to listening to yet another sixth sense.

#### **John Bledsoe:**

Reading a book to be new life style in this year; every people loves to go through a book. When you study a book you can get a great deal of benefit. When you read ebooks, you can improve your knowledge, since book has a lot of information in it. The information that you will get depend on what kinds of book that you have read. If you would like get information about your review, you can read education books, but if you act like you want to entertain yourself you are able to a fiction books, such us novel, comics, along with soon. The Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing will give you a new experience in reading through a book.

#### **Chrissy Stallings:**

As a pupil exactly feel bored to help reading. If their teacher expected them to go to the library or make summary for some reserve, they are complained. Just small students that has reading's heart and soul or real their hobby. They just do what the educator want, like asked to go to the library. They go to right now there

but nothing reading very seriously. Any students feel that studying is not important, boring along with can't see colorful pics on there. Yeah, it is being complicated. Book is very important for you. As we know that on this period, many ways to get whatever you want. Likewise word says, many ways to reach Chinese's country. Therefore , this Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing can make you really feel more interested to read.

**Download and Read Online Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang #D4L7EFXK2MZ**

# **Read Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang for online ebook**

Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang books to read online.

## **Online Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang ebook PDF download**

### **Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang Doc**

Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang Mobipocket

Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang EPub

D4L7EFXK2MZ: Communication and Control in Electric Power Systems: Applications of Parallel and Distributed Processing By Mohammad Shahidehpour, Yaoyu Wang