



Power System Stability: Modelling, Analysis and Control (Iet Power and Energy)

By Abdelhay A. Sallam, Om P. Malik

Download now

Read Online 

Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik

Power System Stability: Modelling, Analysis and Control provides a comprehensive treatment of the subject from both a physical and mathematical perspective and covers a range of topics including modeling, computation of load flow in the transmission grid, stability analysis under both steady-state and disturbed conditions, and appropriate controls to enhance stability.

Organized into four sections; (I) Modeling, (II) Power Flow, (III) Stability Analysis, and IV) Stability Enhancement and Control, this book begins with an introduction to stability modeling, describing the dynamic behavior of power systems which in turn leads to the modeling of each component in the power system. Different techniques are introduced to access the system stability and methods are described that can be used to enhance stability and control the system.

Power System Stability: Modelling, Analysis and Control also covers the development and physical real-time implementation of analytical and artificial intelligence based adaptive power system stabilizers to improve power system dynamic stability.

Topics covered include;

- * modeling of the synchronous machine
- * the synchronous machine connected to power systems
- * modeling of transformers
- * transmission lines and loads
- * power flow analysis
- * optimal power flow
- * small signal stability
- * transient stability
- * transient energy function methods
- * artificial intelligent techniques
- * power system stabilizers
- * series compensation

- * shunt compensation
- * compensation devices
- * recent technologies

 [Download Power System Stability: Modelling, Analysis and Co ...pdf](#)

 [Read Online Power System Stability: Modelling, Analysis and ...pdf](#)

Power System Stability: Modelling, Analysis and Control (Iet Power and Energy)

By Abdelhay A. Sallam, Om P. Malik

Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik

Power System Stability: Modelling, Analysis and Control provides a comprehensive treatment of the subject from both a physical and mathematical perspective and covers a range of topics including modeling, computation of load flow in the transmission grid, stability analysis under both steady-state and disturbed conditions, and appropriate controls to enhance stability.

Organized into four sections; (I) Modeling, (II) Power Flow, (III) Stability Analysis, and IV) Stability Enhancement and Control, this book begins with an introduction to stability modeling, describing the dynamic behavior of power systems which in turn leads to the modeling of each component in the power system. Different techniques are introduced to access the system stability and methods are described that can be used to enhance stability and control the system.

Power System Stability: Modelling, Analysis and Control also covers the development and physical real-time implementation of analytical and artificial intelligence based adaptive power system stabilizers to improve power system dynamic stability.

Topics covered include;

- * modeling of the synchronous machine
- * the synchronous machine connected to power systems
- * modeling of transformers
- * transmission lines and loads
- * power flow analysis
- * optimal power flow
- * small signal stability
- * transient stability
- * transient energy function methods
- * artificial intelligent techniques
- * power system stabilizers
- * series compensation
- * shunt compensation
- * compensation devices
- * recent technologies

Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik Bibliography

- Sales Rank: #4643654 in Books

- Published on: 2015-11-24
- Original language: English
- Number of items: 1
- Dimensions: 9.40" h x 1.10" w x 6.40" l, .0 pounds
- Binding: Hardcover
- 472 pages



[**Download Power System Stability: Modelling, Analysis and Co ...pdf**](#)



[**Read Online Power System Stability: Modelling, Analysis and ...pdf**](#)

Download and Read Free Online Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik

Editorial Review

About the Author

Om P. Malik has taught and carried out extensive research in the area of rotating electric machines, adaptive and AI control, and digital protection of power systems. He was a pioneer in the development of adaptive controllers for real-time applications to improve power system stability and such controllers are employed as power system stabilizers on large generating units.

Abdelhay A. Sallam is a Professor Emeritus of Electrical Engineering at the Port-Said University, Egypt. Dr. Sallam has taught courses on a variety of subjects including power systems, computer methods in power system analysis and distribution systems. He has also served as a consultant, advising companies on the design, installation of power networks, substations, and electric distribution systems.

Users Review

From reader reviews:

Karen Martinez:

Why don't make it to become your habit? Right now, try to prepare your time to do the important action, like looking for your favorite book and reading a reserve. Beside you can solve your condition; you can add your knowledge by the guide entitled Power System Stability: Modelling, Analysis and Control (Iet Power and Energy). Try to stumble through book Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) as your buddy. It means that it can being your friend when you feel alone and beside associated with course make you smarter than ever. Yeah, it is very fortuned for you personally. The book makes you more confidence because you can know anything by the book. So , we need to make new experience along with knowledge with this book.

Eric Baur:

Reading a reserve can be one of a lot of pastime that everyone in the world likes. Do you like reading book consequently. There are a lot of reasons why people enjoy it. First reading a publication will give you a lot of new info. When you read a guide you will get new information due to the fact book is one of several ways to share the information as well as their idea. Second, examining a book will make an individual more imaginative. When you looking at a book especially tale fantasy book the author will bring you to imagine the story how the figures do it anything. Third, you can share your knowledge to other people. When you read this Power System Stability: Modelling, Analysis and Control (Iet Power and Energy), you are able to tells your family, friends in addition to soon about yours reserve. Your knowledge can inspire others, make them reading a publication.

Minnie Rivera:

The particular book Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) has a

lot details on it. So when you read this book you can get a lot of profit. The book was authored by the very famous author. The author makes some research prior to write this book. This kind of book very easy to read you will get the point easily after perusing this book.

Brenda Cornell:

As we know that book is vital thing to add our expertise for everything. By a e-book we can know everything we wish. A book is a pair of written, printed, illustrated or perhaps blank sheet. Every year ended up being exactly added. This publication Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) was filled with regards to science. Spend your spare time to add your knowledge about your scientific disciplines competence. Some people has diverse feel when they reading some sort of book. If you know how big good thing about a book, you can feel enjoy to read a book. In the modern era like at this point, many ways to get book that you wanted.

Download and Read Online Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik #HEPKV4GS32B

Read Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik for online ebook

Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik 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 Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik books to read online.

Online Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik ebook PDF download

Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik Doc

Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik Mobipocket

Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik EPub

HEPKV4GS32B: Power System Stability: Modelling, Analysis and Control (Iet Power and Energy) By Abdelhay A. Sallam, Om P. Malik