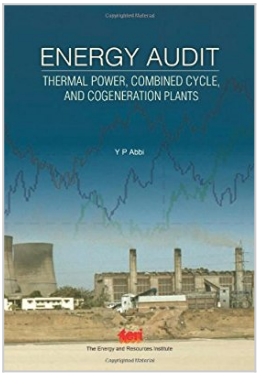

Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants

By Y P Abbi

Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants
By Y P Abbi

The availability of fossil fuels required for power plants is reducing and their costs increasing rapidly. This gives rise to increase in the cost of generation of electricity. But electricity regulators have to control the price of electricity so that consumers are not stressed with high costs. In addition, environmental considerations are forcing power plants to reduce CO2 emissions. Under these circumstances, power plants are constantly under pressure to improve the efficiency of operating plants, and to reduce fuel consumption. In order to progress in this direction, it is important that power plants regularly audit their energy use in terms of the operating plant heat rate and auxiliary power consumption.

Energy Audit of Thermal Power, Combined Cycle, and Cogeneration Plants attempts to refresh the fundamentals of the science and engineering of thermal power plants, and establishes its link with the real power plant performance data through case studies, and further developing techno-economics of the energy efficiency improvement measures. This book will rekindle interest in energy audits and analysis of the data for designing and implementation of energy conservation measures on a continuous basis.

Key features:

Extensive coverage of basic design concepts and equipment details

Specific details on methodology for energy audit data collection for different equipment/subsystems

Analysis of data with the basic objective of energy efficiency improvement of different equipment/subsystems of a power plant

Techno-economics of each energy efficiency/energy conservation measure, to enable management to take right investment decisions

Insightful discussions on advanced technologies like supercritical and IGCC power generation systems

Contents:

Section A Design Concepts
2 Design concepts of steam cycle power plants
3 Design concepts of cogeneration plants
4 Design concepts of combined cycle power plants

Section B Energy Audit of Steam Cycle Power Plants
5 Perspectives of Energy Audits
6 Energy Audit of Boilers and their Auxiliaries
7 Energy Audit of Steam Turbine Generators and their Auxiliaries
8 Techno-economic Analysis of Energy Audit Results
9 Energy Audit of Plant Auxiliaries

Section C Energy Audit of Cogeneration and Combined Cycle Plants
10 Energy Audit of Steam Turbine-based Cogeneration Plants 11 Gas Turbine-based Cogeneration and Combined Cycle Plants

Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants

By Y P Abbi

Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants By Y P Abbi

The availability of fossil fuels required for power plants is reducing and their costs increasing rapidly. This gives rise to increase in the cost of generation of electricity. But electricity regulators have to control the price of electricity so that consumers are not stressed with high costs. In addition, environmental considerations are forcing power plants to reduce CO2 emissions. Under these circumstances, power plants are constantly under pressure to improve the efficiency of operating plants, and to reduce fuel consumption. In order to progress in this direction, it is important that power plants regularly audit their energy use in terms of the operating plant heat rate and auxiliary power consumption.

Energy Audit of Thermal Power, Combined Cycle, and Cogeneration Plants attempts to refresh the fundamentals of the science and engineering of thermal power plants, and establishes its link with the real power plant performance data through case studies, and further developing techno-economics of the energy efficiency improvement measures. This book will rekindle interest in energy audits and analysis of the data for designing and implementation of energy conservation measures on a continuous basis.

Key features:

Extensive coverage of basic design concepts and equipment details

Specific details on methodology for energy audit data collection for different equipment/subsystems

Analysis of data with the basic objective of energy efficiency improvement of different equipment/subsystems of a power plant

Techno-economics of each energy efficiency/energy conservation measure, to enable management to take right investment decisions

Insightful discussions on advanced technologies like supercritical and IGCC power generation systems

Contents:

10 Energy Audit of Steam Turbine-based Cogeneration Plants 11 Gas Turbine-based Cogeneration and Combined Cycle Plants

Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants By Y P Abbi Bibliography

- Sales Rank: #1215963 in Books
- Brand: Brand: The Energy and Resources Institute, TERI
- Published on: 2012-01-20
- Original language: English
- Dimensions: 9.45" h x 6.30" w x .0" l, 1.10 pounds
- Binding: Hardcover
- 288 pages

Editorial Review

Users Review

From reader reviews:

Will Guertin:

In this 21st hundred years, people become competitive in every way. By being competitive currently, people have do something to make these survives, being in the middle of the actual crowded place and notice by surrounding. One thing that at times many people have underestimated this for a while is reading. That's why, by reading a publication your ability to survive boost then having chance to stand up than other is high. For you who want to start reading the book, we give you that Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants book as basic and daily reading publication. Why, because this book is greater than just a book.

Phyllis Spencer:

As people who live in the particular modest era should be up-date about what going on or data even knowledge to make these keep up with the era which can be always change and move ahead. Some of you maybe will certainly update themselves by looking at books. It is a good choice to suit your needs but the problems coming to a person is you don't know which you should start with. This Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants is our recommendation to help you keep up with the world. Why, as this book serves what you want and wish in this era.

Al Fraire:

People live in this new time of lifestyle always attempt to and must have the spare time or they will get great deal of stress from both lifestyle and work. So , if we ask do people have free time, we will say absolutely yes. People is human not a robot. Then we request again, what kind of activity are you experiencing when the spare time coming to you actually of course your answer will unlimited right. Then do you try this one, reading publications. It can be your alternative in spending your spare time, the actual book you have read is usually Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants.

Hector Medlin:

Reading can called imagination hangout, why? Because when you find yourself reading a book particularly book entitled Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants your mind will drift away trough every dimension, wandering in every single aspect that maybe mysterious for but surely can become your mind friends. Imaging just about every word written in a e-book then become one web form conclusion and explanation which maybe you never get before. The Energy Audit: Thermal Power,

Combined Cycle, and Cogeneration Plants giving you yet another experience more than blown away your mind but also giving you useful facts for your better life in this particular era. So now let us explain to you the relaxing pattern the following is your body and mind is going to be pleased when you are finished reading it, like winning a casino game. Do you want to try this extraordinary paying spare time activity?

Read Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants By Y P Abbi for online ebook

Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants By Y P Abbi 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 Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants By Y P Abbi books to read online.

Online Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants By Y P Abbi ebook PDF download

Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants By Y P Abbi Doc

Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants By Y P Abbi Mobipocket

Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants By Y P Abbi EPub

9VXIMCOD76G: Energy Audit: Thermal Power, Combined Cycle, and Cogeneration Plants By Y P Abbi