Modeling and Forecasting Electricity Loads and Prices: A Statistical Approach (The Wiley Finance Series)

Rafal Weron
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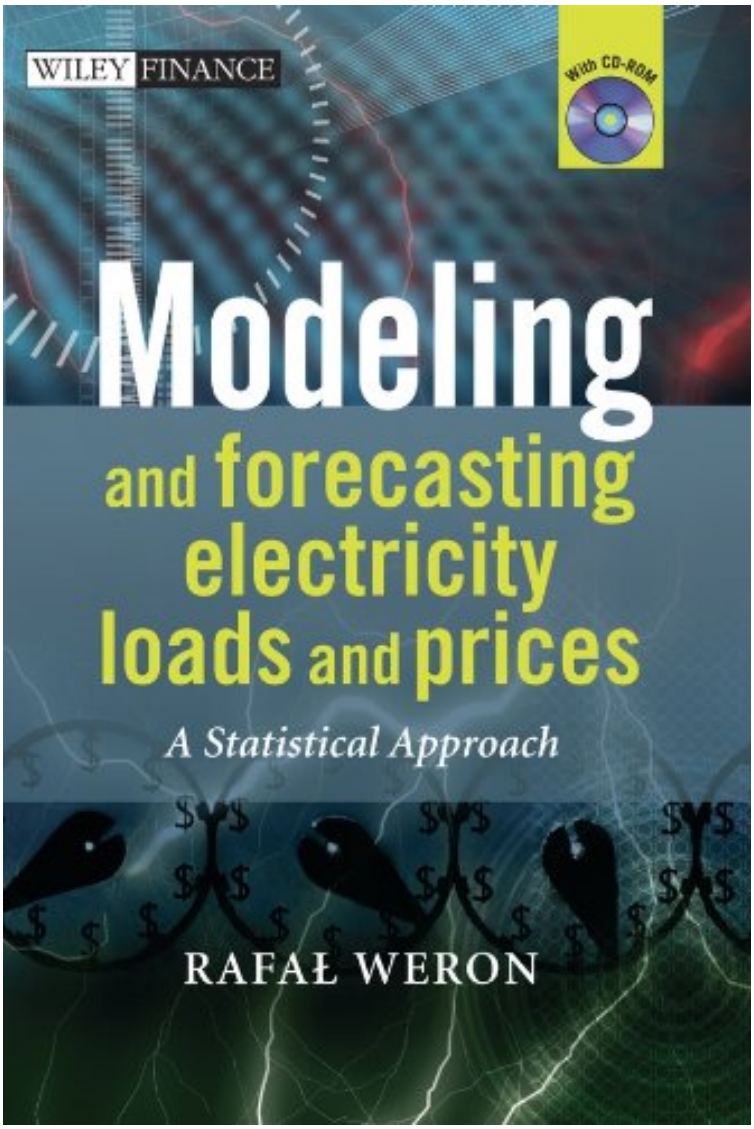

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Rafal Weron : Modeling and Forecasting Electricity Loads and Prices: A Statistical Approach (The Wiley Finance Series) before purchasing it in order to gage whether or not it would be worth my time, and all praised Modeling and Forecasting Electricity Loads and Prices: A Statistical Approach (The Wiley Finance Series):

0 of 0 people found the following review helpful. Three StarsBy Bella ImbragolioBest for seasoned statisticians.0 of 0 people found the following review helpful. Five StarsBy CustomerA classic, and rightly so.2 of 5 people found the

following review helpful. Not fundamental modelingBy GjZA little disappointed. The book only provides blind statistical models and analysis, no fundamental approaches.

This book offers an in-depth and up-to-date review of different statistical tools that can be used to analyze and forecast the dynamics of two crucial for every energy company processesmdash;electricity prices and loads. It provides coverage of seasonal decomposition, mean reversion, heavy-tailed distributions, exponential smoothing, spike preprocessing, autoregressive time series including models with exogenous variables and heteroskedastic (GARCH) components, regime-switching models, interval forecasts, jump-diffusion models, derivatives pricing and the market price of risk. Modeling and Forecasting Electricity Loads and Prices is packaged with a CD containing both the data and detailed examples of implementation of different techniques in Matlab, with additional examples in SAS. A reader can retrace all the intermediate steps of a practical implementation of a model and test his understanding of the method and correctness of the computer code using the same input data. The book will be of particular interest to the quants employed by the utilities, independent power generators and marketers, energy trading desks of the hedge funds and financial institutions, and the executives attending courses designed to help them to brush up on their technical skills. The text will be also of use to graduate students in electrical engineering, econometrics and finance wanting to get a grip on advanced statistical tools applied in this hot area. In fact, there are sixteen Case Studies in the book making it a self-contained tutorial to electricity load and price modeling and forecasting.

From the Inside Flap"This is a timely addition to a rapidly moving area of research. It is a very thorough and critical review of the state of methodological progress on this important topic. New researchers and quantitatively able analysts who are looking for an overall perspective on developments in this field will find the book particularly useful."mdash; Prof. Derek W. Bunn, Professor of Decision Sciences, Director of the Energy Markets Group, London Business School"This book presents modern tools for modeling and forecasting energy loads and prices. The presentation of sixteen case studies guide the reader through the various statistical issues related to load and price modeling and forecasting. the book gives a complete insight into the relevant literature and an excellent survey of the methodologies involved."mdash; Prof. Dr. Wolfgang Hardle, CASE - Center for Applied Statistics and Economics, Institute for Statistics and Econometrics, School of Business and Economics, Humboldt-University, Berlin"Efficient management of the energy markets is one of the most important issues facing global economy. The book provides a systematic exposition of quantitative methods developed for this purpose."mdash; Prof. Wojbor A. Woyczynski, Professor of Statistics, Center for Stochastic and Chaotic Processes in Sciences and Technology, Case Western Reserve University, ClevelandFrom the Back CoverModeling and Forecasting Electricity Loads and Prices offers an in-depth and up-to-date review of different statistical tools that can be used to analyze and forecast the dynamics of two crucial for every energy company processes - electricity prices and loads. It provides coverage of seasonal decomposition, mean reversion, heavy-tailed distributions, exponential smoothing, spike preprocessing, autoregressive time series - including models with exogenous variables and heteroskedastic (GARCH) components, regime-switching models, interval forecasts, jump-diffusion models, derivatives pricing and the market price of risk.An accompanying CD containing both the data and detailed examples of implementation of different techniques in Matlab will enable readers to retrace all the intermediate steps of a practical implementation of a model and test their understanding of the method and correctness of the computer code using the same input data.The book will be of particular interest to the quants employed by the utilities, independent power generators and marketers, energy trading desks of the hedge funds and financial institutions, and the executives attending courses designed to help them to rush up on their technical skills. The text will be also of use to graduate students in electrical engineering, econometrics and fiance wanting to get a grip on advanced Statistical tools applied in this hot area. Complete with sixteen case studies, this book is a highly practical, self-contained tutorial to electricity load and price modeling and forecasting."the ability to predict correctly the system load, customer specific load and the electricity prices is of critical importance to any regulated utility, independent power producer, power marketers and traders. Given high volatility of electricity prices, even a small forecasting error can have a very significant impact on the bottom line. Dr. Weron's book provides an in-depth, up-to-date and very well organized review of Statistical techniques for forecasting power load and prices and is highly recommended to any practitioner of the modern electricity markets."mdash; Vince Kaminski, Managing Director, Citigroup, Houston and Adjunct Professor, Rice University, HoustonAbout the AuthorRAFAL WERON received his M.Sc. (1995) and Ph.D. (1999) degrees in applied mathematics from the Wroclaw University of Technology (WUT), Poland. He currently holds a position of Assistant Professor at WUT. His research focuses on risk management and forecasting in the power markets and computational statistics as applied to finance and insurance.Rafal Weron is the co-author of three books and over 70 research articles, book chapters, and conference papers. His professional experience includes design of the risk management system for BOT Holding (BOT Goacute;rnictwo i Energetyka S.A.), development of insurance strategies for Polish Power Grid Co. (PSE S.A.) and Hydro-storage Power Plants Co. (ESP S.A.), as well as implementation of yield curve calibration and option pricing software for LUKAS Bank S.A. (Creacute;dit Agricole Group). He has also been a consultant or executive teacher to a large number of banks and

corporations.