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Titolo	Modeling and Forecasting Electricity Demand : A Risk Management Perspective // by Kevin Berk
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Soggetti	Energy policy Probabilities Energy consumption Energy Policy, Economics and Management Probability Theory and Stochastic Processes Energy Efficiency
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Electricity Market -- Energy Economy in Enterprises -- Time Series Analysis -- A one Factor Model for medium-term Load Forecasting -- Retail Contract Evaluation and Pricing -- MATLAB Implementation.
Sommario/riassunto	The master thesis of Kevin Berk develops a stochastic model for the electricity demand of small and medium-sized companies that is flexible enough so that it can be used for various business sectors. The model incorporates the grid load as an exogenous factor and seasonalities on a daily, weekly and yearly basis. It is demonstrated how the model can be used e.g. for estimating the risk of retail contracts. The uncertainty of electricity demand is an important risk factor for customers as well as for utilities and retailers. As a consequence, forecasting electricity load and its risk is now an integral component of the risk management for all market

participants. Contents Electricity Market Energy Economy in Enterprises
Time Series Analysis A one Factor Model for medium-term Load
Forecasting Retail Contract Evaluation and Pricing MATLAB
Implementation Target Groups Researchers and students in energy
economics or mathematics and statistics with a focus on applications in
energy markets Professionals in electricity utilities, energy vendors, risk
management The Author Kevin Berk is a Ph.D. student at the
Mathematics Department of the University Siegen, Germany. His major
research focus is risk management and time series models with
applications in energy markets.
